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**Sustainable Rural Tourism: The Ecological Attitudes of Visitors and  
Farm-based Tourism in Dumfries & Galloway, south-west Scotland**

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Presented as a thesis for the degree of Doctor of Philosophy in the  
University of Glasgow

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## ABSTRACT

This thesis reports the findings of empirical research investigating the ecological attitudes of visitors and farm-based tourism in the rural region of Dumfries & Galloway, south-west Scotland. As the concept of sustainable rural tourism gathers momentum as an appropriate philosophy for addressing rural restructuring and agricultural decline, stakeholders in Dumfries & Galloway aim to position the region as an ecotourism or environmentally friendly destination.

A review of literature reveals that ecotourism is a concept or activity seldom discussed in a Scottish or UK context, and this thesis queries the appropriateness and potential of ecotourism as a model for development in Dumfries & Galloway. This research questions whether visitors to Dumfries & Galloway can be differentiated by ecological attitude using the New Ecological Paradigm scale, concluding that all visitors hold pro-ecological attitudes to a greater or lesser degree. Although all visitors were found to be similar in terms of demographics, those visiting the region for nature-focused activities hold significantly higher pro-ecological attitudes. Since attitudes are theorized as a precursor to behaviour, a major conclusion is that visitors who are most likely to react to the region's sought after status as an ecotourism destination are unlikely to consciously jeopardize the region's 'natural' assets.

Farm-based tourism is a relatively under-researched form of rural tourism in Scotland. This thesis critiques farm-based accommodation as a sustainable form of rural tourism revealing that just 4.4% of main agricultural holdings in Dumfries & Galloway have adopted this signifier of the post-productivist transition. As a structural diversification for farmers its economic contribution is typically small but fundamental for farm survival and continuance of agricultural identity. Farm accommodation delivers important consumer experiences that few other forms of rural accommodation can achieve however the product is under-developed in both its networking potential and brand identity. The research reveals that the adoption of tourism on farms can reduce provider isolation and empower spouses, and is compatible with the concept of ecotourism through its environmental attributes, social and economic benefits.

It is concluded that before Dumfries & Galloway can claim to be an ecotourism and environmentally friendly destination, a number of issues such as high private transport use and lack of environmentally accredited supply services need to be addressed.

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## CHAPTER ONE

### 1 INTRODUCTION TO THE THESIS

#### 1.1 Setting the context

The consumption of the countryside for leisure purposes is not a new phenomenon (Seaton, 1998), but arguably it was of minor economic consequence prior to World War II (Butler, 1998; Shaw and Williams, 1994). This is evidently no longer the case as tourism and recreation have become extremely important for many rural economies.<sup>1</sup> In predominantly rural regions of Scotland such as the Highlands and Dumfries & Galloway, tourism jobs account for 13.5% and 11.4% of all employment respectively (VisitScotland, 2006). Garrod *et al.* (2006) argue that the tourism 'industry' has become the lynch-pin of many rural communities having effectively replaced agriculture in this role.

Declining product prices, limited job opportunities, falling or stagnant incomes and out migration of young people have led to growing concern about the future of many rural areas (Hyttinen *et al.*, 2000). Tourism development in such areas has been considered a promising solution to these difficulties through increasing local employment levels directly and indirectly, stimulating domestic industries, encouraging the diversification of the local economy and improving local infrastructure (Holden, 2000; Pigram and Jenkins, 1999). However, Hall and Page (1999) warn that the promotion of tourism is not appropriate in all rural areas and that tourism should form part of a portfolio of strategies which collectively contribute to successful rural development.

According to Butler (1998) the significance now placed on tourism and recreation in rural areas has been caused by several interrelated factors: a spectacular rise in leisure activities in all high income countries; major changes in agriculture; significant shifts in public tastes and preferences; and the effects of a variety of technological changes and innovations. Despite the absence of consistent data

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<sup>1</sup> Defining what is rural is problematic (Ilbery, 1998; Murdoch and Pratt, 1993; Roberts and Hall, 2001) and is discussed in the following chapter.

sources providing a measure of rural tourism (Lane, 1994a), Roberts and Hall (2001) estimate that over one fifth of all tourism activity in Europe is based in the countryside.

In this thesis tourism in rural areas is investigated from two perspectives. The first angle is primarily demand-focused, and concentrates on the environmental attitudes of visitors to Dumfries & Galloway. Commentators such as Roberts and Hall (2001) have noted that environmental awareness among consumers appears to be rising, yet there is little evidence to suggest that tourists/visitors to rural areas mimic this trend. However, it can also be argued that the literature surrounding the environmental attitudes of visitors to rural areas is currently sparse and any firm generic conclusions can not be justified. Furthermore, there is little evidence to suggest that rural visitors represent a homogenous group (Frochot, 2005) and therefore environmental attitudes are also likely to differ. This thesis will explore the different characteristics of visitors and compare environmental attitudes. For example, do visitors who come to the region with the specific intention of pursuing nature-focused activities have high or low ecological attitudes and are their attitudes towards the environment different from other visitors?

The main way this thesis explores the environmental attitudes of visitors to Dumfries & Galloway is through the New Ecological Paradigm (NEP) scale (Dunlap *et al.*, 2000). Although this attitude scale has been used successfully with different populations, its use in a tourism context remains relatively novel (Lück, 2003), especially in Scotland and the UK. The NEP represents a series of 15 statements that tap primitive human beliefs about the environment, and depending on the summated responses given, can be used to place individuals on a scale with polar extremes. At one end of the scale lie ecocentric or biocentric attitudes toward the environment and its use while the other polar extreme represents a human focused or anthropocentric attitude towards the environment and resources. By conceptualising primitive beliefs as a fundamental precursor to ways in which people behave, as suggested in theories of planned behaviour and models of responsible environmental behaviour (Hines *et al.*, 1987; Ajzen and Driver, 1992; Lee and Moscardo, 2005), this research not only provides an indication of the environmental attitudes of visitors but also a pointer of how visitors will act in, and impact on, sites of ecological importance.

This research is particularly important in the study region given that Dumfries & Galloway Tourist Board (now VisitScotland Dumfries & Galloway) aim to position the region as a primary destination for ecotourism (Dumfries & Galloway Tourist Board, 2001). This positioning could mean a number of things since ecotourism is a contested concept (Wight, 2001). Ecotourism can be viewed as a development ideology similar to that of sustainable development but with a specific focus on 'natural' areas. It is also conceptualised as a tourist activity such as wildlife watching or other non-consumptive use of the 'natural' milieu. Furthermore, the term has also been used as a marketing device to attract visitors to an area. Given that the Tourist Board is primarily a promotional body with a remit to attract visitors it is likely that their enthusiasm for ecotourism is driven by the reported rapid global growth rates for this type of tourist experience (Luzar *et al.*, 1998). In other words, marketing Dumfries & Galloway as an ecotourism destination could be viewed as an attempt to attract more visitors to the region with the primary objective of economic development. However, in order to justify this claim the region should at least assess the ideological components of ecotourism and identify whether such a strategy is transparent and appropriate. This has not been done to date. It is important to note that ecotourism is a concept mostly associated with long-haul travel to mega-diverse countries such as Australia, Brazil, Ecuador, Congo and Madagascar and rarely is it allied with countries such as Scotland (Bjork, 2000; Blangy and Vautier, 2001). This leads one to question the appropriateness of positioning Dumfries & Galloway as an ecotourism destination. Have visitors to the region heard of ecotourism? Do they consider themselves to be ecotourists? What do they associate the concept with and does Dumfries & Galloway hold these attributes? These are important questions that will be explored in this thesis.

There is also another fundamental aspect that needs to be addressed. Encouraging more people to visit 'natural' areas or sites of ecological importance brings economic benefits but also a risk of environmental degradation if participation levels exceed the capacity of the environment to absorb impacts (Butler, 1998). As Uysal *et al.* (1994: 284) have argued "The type of tourists and tourist activities a host community attracts may play a key role in determining the environmental impact of tourism". This hazard can be partially ameliorated if visitors hold strong pro-ecological or pro-environmental views and are therefore less likely to deliberately cause environmental

degradation (Duffy, 2002). In the words of Butcher (1997:34) "Tourist behaviour is seen as crucial to sustainable tourism". Through the application of the New Ecological Paradigm scale in conjunction with models of responsible behaviour this thesis investigates the ecological attitudes of visitors with a specific interest in nature; do these visitors hold pro-ecological attitudes? This exploration of attitudes can help with identifying the potential environmental impact of developing Dumfries & Galloway as an ecotourism destination.

While revealing the environmental attitudes of visitors may provide an indication of how they will act in, and impact on, the rural environment it is also fundamental to consider the ways in which tourism suppliers contribute towards sustainable rural development. Therefore the second perspective of this thesis is supply-focused and investigates a form of rural tourism with a long history in certain countries (Hummelbrunner and Miglbauer, 1994). Described by some to be environmentally and socially sustainable owing to its small-scale and integration within existing rural landscapes (Embacher, 1994), farm-based tourism has received considerable attention in the literature for its dual role as a rural tourism product and diversification strategy addressing the declining fortunes of agricultural communities experiencing rural restructuring. Oppermann (1995) argues that farm-based tourism lacks a comprehensive body of knowledge and a theoretical framework, although recent research efforts have theorized and contextualised the expansion and adoption of tourism as a diversification strategy as one aspect of the 'post-productivist transition' (Butler, 1998; Ilbery *et al.*, 1998; Sharpley and Vass, 2006; Walford, 2001).

While there are some studies of farm-based tourism in North America, New Zealand and Australia (Hall, 1995; Morrison *et al.*, 1996; Oppermann, 1998; Pearce, 1990; Weaver and Fennell, 1997) most research provides examples from Europe which currently dominates the global farm-based tourism industry (Weaver and Fennell, 1997). Not all countries in Europe are well represented in the farm-based tourism literature. For example, little is known about farm-based tourism in Scotland and the important contribution it plays as a form of rural tourism and in rural development (Gladstone and Morris, 2000). In south-west Scotland, where agriculture plays a



fundamental, but declining<sup>2</sup>, role in the regional economy alongside some other key sectors (Scottish Enterprise Dumfries & Galloway, 2004), it is surprising to find that very little is known about the extent and contribution of farm-based tourism as a sustainable rural tourism product. For example, does farm-based accommodation supply in Dumfries & Galloway represent a significant proportion of regional tourism stock? What types of accommodation are offered? What, if any, elements of the farm environment are perceived to be important to visitors? Are farm-based tourism enterprises networked and jointly promoted or do these enterprises operate in isolation? These and other questions relating to farm-based tourism as a product are addressed in this thesis with the aim of achieving a greater understanding of this form of tourism in rural areas.

There has also been little investigation within Dumfries & Galloway of the role that tourism plays within farming families. Why, for example, have some farmers in Dumfries & Galloway decided to diversify into tourism? Have elements of the post-productivist transition been chiefly influential or are there other drivers? One area of neglect in the farm-based tourism literature has been to determine the attitudes of farm-based tourism operators and establish the aspects of tourism provision that are sustainable socially and those that are problematic (Sharpley and Vass, 2006).

While Embacher (1994) argues that farm-based tourism is a sustainable form of tourism owing to its small-scale and integration within the rural milieu, the sustainability of this form of rural tourism requires a deeper analysis of factors which have been identified as fundamental elements of sustainable rural tourism. Some of these include effective promotion (Clarke, 1996a, 1996b, 1999; Evans and Ilbery, 1992a), networking and partnerships (Mitchell and Hall, 2005), quality and environmental performance (Leslie, 2005). Given that the Tourist Board aim to position the region as an ecotourism destination this thesis will also explore whether farm-based accommodation conforms to what Moscardo *et al* (1996) describe as 'ecologically-sustainable accommodation'. By conceptualising ecotourism as an

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<sup>2</sup>The Agriculture Census, published every June by SEERAD, shows that in Dumfries & Galloway there has been a 40% decrease in regular workers and a 25% decrease in the number of casual and seasonal workers over the period from 1983 to 2003. However, a 50% increase in spouses working has been reported over the same period.

idealised philosophy of what should be rather than narrowly defining it as just an activity, such as bird-watching, it is important to consider services such as accommodation when assessing the regions ecotourism potential. The potential synergy of farm accommodation and ecotourism has been explored by Fennell and Weaver (1997) with reference to Saskatchewan, Canada. These authors cite two main complementary factors that help to forge a relationship between farm accommodation and ecotourism. First, the rural areas where farms with accommodation are located provide not only the relatively un-crowded spaces amenable to ecotourism, but also the remnant – to – extensive natural habitats which harbour wildlife. Secondly, by merit of their small size, local ownership, and integration into the local rural economy, farm-based accommodation as a concept is a form of alternative tourism ideally suited to fulfil the call for sustainable rural tourism options. This thesis will explore some of these ideas in the context of Dumfries & Galloway and by doing so further explore the potential synergistic relationship between ecotourism and farm-based accommodation.

Using a mixed method approach, this thesis aims to address these shortfalls, and by doing so contribute to the existing literature, giving voice to farm-based tourism providers and highlighting the distinctive nature of farm-based tourism as an important form of rural tourism and development. The overarching aim of investigating farm-based tourism in Dumfries & Galloway is to assess the ways in which it contributes, or otherwise, to sustainable rural tourism development.

## **1.2 Broad aims of the thesis**

This thesis will address both demand and supply side variables in its assessment of sustainable tourism in Dumfries & Galloway. In terms of demand it has been noted that there is currently little evidence of green consumerism in tourism but there is also a lack of research addressing the environmental attitudes of visitors to rural areas. Therefore the propensity to consume green products by establishing environmental attitudes has not been determined. In addressing these issues, the broad aims of this thesis are as follows:

- To identify the environmental attitudes of visitors to Dumfries & Galloway
- To compare and contrast characteristics, attitudes and trip purpose of visitors and identify if visitors can be segmented based on environmental attitude
- To highlight the implications of these findings for the sustainable development of rural tourism in Dumfries & Galloway

The first aim will establish the environmental attitudes of visitors to the region by using the New Ecological Paradigm scale and identify if visitors hold ecocentric or anthropocentric attitudes towards the environment. This will help to establish the susceptibility to consume green products in tourism. The second aim takes this further and compares summated responses to the NEP across a range of characteristics in order to identify if certain tourist segments hold higher or lower environmental attitudes. This will establish if rural visitors can be segmented based on their environmental attitudes. It will provide an indication of how visitors are likely to behave in ecotourism venues. The results of this research will provide data allowing an assessment of Dumfries & Galloway as a sustainable tourism destination to be made from a supply perspective.

Addressing sustainable tourism development from a supply perspective, the broad aims of the thesis are as follows:

- To identify the extent and characteristics of farm-based accommodation supply in Dumfries & Galloway and the characteristics and views of farm-based accommodation demand and supply
- To reveal ways in which farm-based accommodation contributes or otherwise to economic, social and environmental sustainability
- To identify the potential of farm-based tourism to function as a form of sustainable rural tourism

Farm-based accommodation provision could be considered to be one of the most sustainable forms of rural tourism supply given its role as a diversification strategy addressing the financial difficulties faced by farmers. It typically makes use of existing resources on the farm that are already integrated within the landscape. It can also potentially provide employment in areas where few other opportunities exist. However, very little has been documented on farm-based accommodation supply in Scotland. The first aim is therefore to identify the extent of this form of rural accommodation and establish the characteristics. The second aim addresses the ways in which farm-based accommodation contributes to sustainable tourism development using a range of indicators related to the three main facets of the concept of sustainable tourism development. For example, sustainable tourism should create employment opportunities for local communities and this thesis identifies farm-based accommodation's contribution. Likewise, in order to be economically sustainable an enterprise should create income that is retained locally and this will also be assessed. Another important facet of sustainable tourism development is environmental sustainability. In other words, what is the environmental impact of the product and what measures have been taken to reduce negative impacts? In this thesis membership of the Green Tourism Business Scheme (GTBS) is used as one indicator of sustainable practice in addition to the environmental practices of farm-based accommodation providers. The third major facet of the concept of sustainable tourism development is the social dimension. The social indicators chosen are not easily compiled into one quantitative measurement that affords comparison over a period of time. They are deliberately qualitative to capture response richness and serve to explore issues such as the role that farm accommodation provision plays in retaining agricultural identity, empowerment, operator satisfaction, reducing isolation, education and challenges. The final aim will assess the potential of this unique form of accommodation to function as a form of sustainable rural tourism and consider synergy with the concept of ecotourism.

### **1.3 Structure of the thesis**

This thesis is structured as follows. This first chapter has provided an introduction to the thesis and identified the broad aims of the research. Chapter Two presents a

review of literature and expands on the thesis topics. Chapter Three provides a description of the study region of Dumfries & Galloway following which Chapter Four presents the methodology and methods used in this thesis. Chapter Five presents the findings of the ecological attitudes of visitors to Dumfries & Galloway. Chapter Six presents the findings from the investigation of farm-based accommodation as a sustainable structural diversification strategy and form of rural tourism. Chapter Seven critiques the findings of Chapter's Five and Six in the context of sustainable rural tourism and offers some conclusions and areas of future research.

## CHAPTER TWO

### 2 REVIEW OF LITERATURE

#### 2.1 Introduction

For those with the financial means, tourism is widely understood both as a motif of escape and as an opportunity to seek intrinsically motivated goals (Cater and Smith, 2003). It is rooted in enjoyment, well-being and personal satisfaction (Shaw and Williams, 1994). Cater and Smith (2003:196) explain that touristic experiences are becoming more and more influential in modern life because contemporary work seems without clear meaning, and leisure time “creates the space in which we look for meaning in our lives”. McIntosh and Goeldner (in Roberts and Hall, 2001:129) have identified four different motivation categories in tourism:

1. *Physical motivators*: needs for rest and recuperation or for sport and physical activity.
2. *Cultural motivators*: needs to visit and learn about new places and to experience new cultures.
3. *Interpersonal motivators*: needs to extend friendships and to meet new people, perhaps a search for spirituality.
4. *Status and prestige motivators*: the expression of self through tourism and the desire for recognition by others.

The study of tourism, according to Mathieson and Wall (1982:1), is “the study of people away from their usual habitat, of the establishments which respond to the requirements of travellers, and of the impacts that they have on the economic, physical and social well-being of their hosts”. Although described as ‘hosts’, this term has received some criticism since in some cases tourism is something that is tolerated or even forced upon communities as opposed to being welcomed (Holden, 2000; McKerchar, 2003). Sustainable tourism development aims to address such issues by incorporating the views and needs of local communities in the planning and development stages (Lane, 1994b).

This thesis concentrates on a particular type of geographical space, discussed below, which is not easily defined but where tourism is conspicuous and has impacts. The ecological attitudes of visitors and farm-based tourism are the focus of this thesis, however before these are discussed, the wider concept of rural tourism is examined.

## **2.2 The concept of rural tourism**

Rural tourism is not an easy concept to define, not least because of definitional problems surrounding the term 'rural' (Frochot, 2005; Halfacree, 1993, 1995; Hoggart, 1988, 1990; Ilbery, 1998; Lane, 1994a; Roberts and Hall, 2001; Woods, 2005). Consequently it is not surprising that Sharpley and Sharpley (1997b) amongst others argue that there is no single definition of rural tourism that is commonly accepted (Sørensen and Nilsson, 2003). While a simple definition of rural tourism could be 'tourism that takes place in the countryside' (Lane, 1994a), this conveniently avoids ongoing debates regarding the nature and characteristics of rural areas which make them attractive as tourism destinations. Hence it is appropriate to spend some time reviewing how the rural has been perceived and what, if anything makes tourism in the countryside distinguishable from other forms of tourism. It is also important to make clear what is meant by the term 'tourism' in this research.

### *2.2.1 Tourism: the search for an operational definition*

The term 'tourism' is a contested concept (Holden, 2000; Lickorish and Jenkins, 1997) and like commentators addressing rural issues, there appears to be a special place at the outset of many texts where arguments commence on definitions (e.g. Boniface and Cooper, 2001; Fennell, 2003; Newsome *et al.*, 2002; Shaw and Williams, 2002; Standeven and De Knop, 1999; Theobald, 1998). A conceptual definition of tourism involves the travel of people to destinations away from their permanent residence or workplace and the provision of facilities created to cater for the needs arising from this travel (Mathieson and Wall, 1982). A more recent technical definition extends the scope of tourism, defining it as a set of activities performed by people who travel and stay in places outside their habitual environment

for not more than one consecutive year, for leisure, business and other purposes (The European Commission, 2003).

Therefore from a demand perspective, tourism involves displacement outside the permanent environment of the visitor. Unlike some who maintain that tourism involves at least one overnight stay (McIntosh and Goeldner, 1986; VisitScotland, 2004a), the above definitions and this thesis place no restrictions on the minimum length of time spent in any area. This effectively means that day-visitors or recreationalists who can generate substantial business for attractions, restaurants and other recreation resources are not excluded (Theobald, 1998). Although tourism and recreation are not synonymous since recreational motivations represent just one of many motivations to travel, Roberts and Hall (2001) note that from a consumer behaviour perspective both are consumption experiences and can therefore be studied together. The definition cited by the European Commission (EC) has a maximum time, usually a year, beyond which one ceases to become a tourist. This is a technical detail used for the collection of data at the international, national and local levels by data collecting bodies such as the VisitScotland, the European Commission and the United Nations World Tourism Organization (UNWTO). Most tourists are likely to spend no longer than a month in their chosen destination at any one time.

Determining who is a tourist and who is not has become blurred in recent times partly because of second home ownership. Tourism clearly involves travel for pleasure purposes, and includes those visiting friends and family. It may also include visitors who travel for business purposes since they also make use of tourism facilities such as accommodation. Business visitors may also engage in leisure and touristic activities alongside their main work motivation for visiting an area.

Although missing from the EC's interpretation, the tourism equation also has a supply side, captured by MacIntosh and Goeldner (1986:4) who suggest tourism is "the sum of the phenomena and relationships arising from the interaction of tourists, business suppliers, host governments and host communities in the process of attracting and hosting these tourists and other visitors". Although tourism is widely cited as an 'industry', Dickorish and Jenkins (1997) suggest it does not have the usual production function, or an output which can be physically measured, unlike

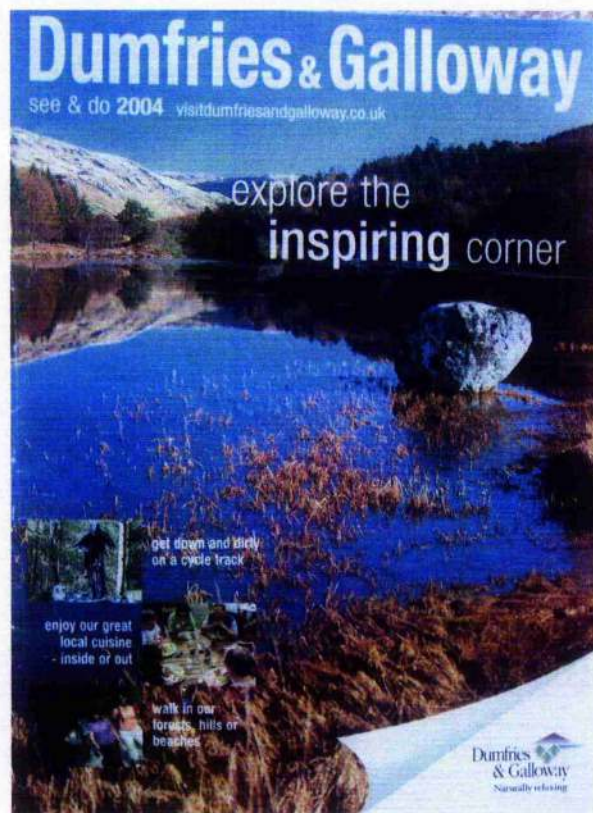


agriculture (tonnes of wheat, etc.). However it could be argued that 'satisfaction' is a measurable output from tourism although this has many dimensions and attributes that can be specific to an individual (Pizam and Ellis, 1999). While it is debateable whether a tourism 'industry' exists (Holden, 2000), certain terms like 'mass' which often refer to standardised, inflexible and identical holiday packages sold through tour operators for the consumption of the masses, has common usage in the tourism literature. 'Mass tourism' is frequently used to describe a type of tourism that displays the characteristics and mimics Fordist production models (Poon, 1993). It is often less associated with rural tourism and more allied with sun, sea and sand holidays although some commentators would include rural tourism as a form of mass tourism owing to the large numbers visiting these areas (Roberts and Hall, 2001). In addition, not all rural accommodation types are small-scale and intimate, an example being large-scale caravan parks. Agreeing with Holden (2000), it can be suggested that tourism is best conceptualised as a 'system' where every component, such as tourists, government, accommodation and infrastructure, is related to every other part and no manager or owner involved in the tourism system has complete control over its development.

### 2.2.2 *The rural environment: modern myths and problematic definitions*

Defining rural or rurality has occupied geographers and others for several decades and as yet there remains little chance of any universal consensus. Nevertheless, Ilbery (1998:3) [original emphasis] suggests that "*rural* remains an important category because behaviour and decision making are influenced by people's perceptions of rural". Not only do millions of people consider themselves to be rural, live in rural environments and follow a rural way of life (Woods, 2005), rurality and the rural environment are commodified and sold for the consumption of tourists. The modern myth of the rural idyll that projects the countryside and country life as more wholesome and natural in comparison to urban life, possessing greater moral influence, a more kind, civilised and peaceful place, and in particular, the last resting place of traditional values (Ilbery, 1998; Little and Austin, 1996; Newby, 1986; Short, 1991) remains a powerful weapon for tourism officials and other stakeholders seeking to attract predominantly urban-based visitors (Urry, 2002).

As modern urban life becomes faster, more demanding and less authentic, the rural has taken on a more utopian status (Roberts and Hall, 2001). The idea that the rural environment and inhabitants are something special is not a new perception and can be traced back to Rousseau and the idea of the 'noble savage' (Barry, 1999). However unlike Rousseau's reaction against the Enlightenment, Urry (2002) argues that the contemporary fixation with rural areas is an expression of postmodernism. He believes that "the attractions of the countryside derive in part from the disillusionment with elements of modern [urban life]" and that rural areas are thought to embody elements of the romantic rural idyll (Urry, 2002:88). He argues that certain types of countryside are more attractive to prospective service-class visitors, namely those consistent with the idea of 'landscape'. These include rural landscapes where farm machinery, labourers, tractors, telegraph wires, dead animals, concrete buildings, motorways, polluted land and water, nuclear power, diseased animals, poverty and other tourists are erased from the picture (Urry, 2002). See Plate 2.1 below.



Source: VisitScotland Dumfries & Galloway promotional brochure (2004)

**Plate 2.1**      **The ideal romantic landscape?**

Rural idylls will fluctuate from person to person but collectively may correspond to cultural dissimilarities between regions and countries. Roberts and Hall (2001:38) suggest that recreationalists and policy-makers in England may be guided by a rural 'aesthetic' inspired from some idealistic pre-industrial idyll of meadows, villages and country lanes, whereas in North America rurality is often conceived as 'preserved wilderness'.

Constructing the rural for the tourist gaze is clearly important for tourism promoters, and describing the rural is also important for researchers working within this difficult-to-define space. Halfacree (1993) recognized four different styles of defining rural which are discussed below. The first of these are descriptive accounts where different parameters and statistical measures such as settlement size and population density describe its socio-spatial characteristics, used by, among others the Scottish Executive. Criticisms of using descriptive accounts include the fact that different nations use different criteria to define rural areas (Table 2.1). Nevertheless, Lane (1994a) suggests that rural areas do tend to have lower population densities and smaller settlements which occupy small patches of the landscape. Most of the landscape is dominated by fields, pastures, extensive woodland and forest, water, hills and mountains (Wiggins and Proctor, 2001). These non-urban features are important in tourism terms since the majority of tourists come from built-up densely populated settlements and seek a change of scene (Lane, 1994a), or more embodied experiences with these landscape elements which are often absent from urban areas (Cater and Smith, 2003).

**Table 2.1** Examples of national criteria for defining rural

<i>Country</i>	<i>Criteria</i>
Austria & Canada	Places of fewer than 1,000 people with a population density of less than 400 per km <sup>-2</sup>
Denmark & Norway	Agglomerations of fewer than 200 inhabitants
France	Parishes containing an agglomeration of less than 2,000 people living in contiguous houses, or with not more than 200 metres between the houses
Portugal & Spain	Parishes of fewer than 10,000 people
Scotland <sup>1</sup>	Settlements with a population of less than 3,000

<sup>1</sup>The Scottish Executive defines rural Scotland as settlements with a population of less than 3000, but supplements this inadequate interpretation with an eight-fold rural – urban classification map which segments rural areas into different types based on the time it takes to drive to a settlement with a population of 10,000 or more ([www.scotland.gov.uk/Topics/Rural/rural-policy/16780/6661](http://www.scotland.gov.uk/Topics/Rural/rural-policy/16780/6661)) (sources: Lane, 1994a; Roberts and Hall, 2001; Scottish Executive website).

An alternative socio-cultural approach to defining the rural endeavours to identify rural societies using distinctions between rural and urban society on the basis of residents' values, beliefs, behaviour, social and cultural characteristics (Woods, 2005). Perhaps the best known examples of this approach are the models developed by Wirth (1938), Tönnies (1963) and Frankenberg (1966) whose binary contrasts depict the rural as retaining a traditional social structure (Table 2.2).

**Table 2.2** Characteristics of rural and urban societies

<i>Rural</i>	<i>Urban</i>
1. Community	1. Association
2. Social fields involving few but multiple role relationships	2. Social fields involving many overlapping role relationships
3. Different social roles played by same person	3. Different social roles played by different people
4. Simple economies	4. Diverse economies
5. Little division of labour	5. Great specialization in labour force
6. Ascribed status	6. Achieved status
7. Education according to status	7. Status derived from education
8. Role embracement	8. Role commitment
9. Close-knit networks	9. Loose-knit networks
10. Locals	10. Cosmopolitans
11. Economic class is one of several divisions	11. Economic class is the major division
12. Conjunction	12. Segregation
13. Integration with work environment	13. Separation of work environment

(source: Frankenberg, 1966 in Lane, 1994a)

For Roberts and Hall (2001:13) “of all the perceptions of rurality, perhaps the most widely held, particularly among urban residents, is that the countryside retains the traditional social structures and values that have been largely lost in modern, urban society”. In a tourism context, researchers such as Lane (1994a) and Roberts and Hall (2001) suggest there can be no doubt that many tourists are motivated by the desire to see or experience traditional lifestyles as part of an ever-increasing interest in heritage. These researchers note that, if managed carefully, tourism can help maintain traditional social and cultural structures but at the same time it can undermine these structures and jeopardise the stability of rural societies and cultures and destroy the very object that attracts tourists to a rural area (Hall and Jenkins, 1998).

The rural – urban continuum concept suggests that communities can be identified as displaying varying degrees of urban and rural characteristics while undergoing active change. Lane (1994a) describes this concept as having polar extremes with sparsely populated remote wilderness at one end and ‘world city’ (the ultimate expression of urbanisation) at the other; the edge of suburbia being the midpoint. This approach to defining the rural, like all others, has been subjected to criticism (see Roberts and Hall, 2001; Woods, 2005), although Lane (1994a) maintains the value of the continuum concept for defining ‘rural tourism’. He postulates that some rural tourism areas will display urban tourism characteristics (Table 2.3) and some will be in the process of change.

**Table 2.3      Contrasting features between urban/resort tourism and rural tourism**

<b>Urban/ Resort Tourism</b>	<b>Rural tourism</b>
Little open space	Open space
Settlements over 10,000	Settlements under 10,000
Densely populated	Sparely populated
Built environment	'Natural' environment
Many indoor activities	Many outdoor activities
Infrastructure intensive	Infrastructure weak
Strong entertainment/retail base	Strong individual activity base
Large establishments	Small establishments
Nationally/internationally owned businesses	Locally owned businesses
Much full-time involvement in tourism	Much part-time involvement in tourism
No farm/ forestry involvement	Some farm/ forestry involvement
Tourism interest self supporting	Tourism supports other interests
Workers may live far from workplace	Workers often live close to workplace
Rarely influenced by seasonal factors	Often influenced by seasonal factors
Many guests	Few guests
Guest relationships anonymous	Guest relationships personal
Professional management	Amateur management
Cosmopolitan in atmosphere	Local in atmosphere
Many modern buildings	Many older buildings
Development/ growth ethic	Conservation/ limits to growth ethic
General in appeal	Specialist appeal
Broad marketing operation	Niche marketing

(source: Lane, 1994a)

Halfacree (1993) also describes a 'rural as a locality' approach which assumes a distinctive type of locality. This critical realism approach differs from the previously mentioned ways of defining the rural by focusing on the processes that might create distinctive rural localities.<sup>3</sup> Hoggart (1990:248) argues that a satisfactory definition of the rural requires the need to exhibit: (1) the presence of significant societal structures operating unambiguously at the local level; and, (2) that these local level structures enable us to make a clear distinction between what can be termed 'rural' and 'urban' environments. However, this approach fails on the basis that the structural features claimed to be rural can not be proven to be uniquely or intrinsically rural (Woods, 2005).

Land-use and economy are further features used in the literature to differentiate the urban from the rural. Unlike extensively built-up urban areas, rural land is typically

<sup>3</sup> In this context critical realism refers to a position that maintains that there exists an objectively knowable, mind-independent reality, whilst acknowledging the roles of perception and cognition.

under agriculture, forest and woodland with most areas in a natural or semi-natural state (Wiggins and Proctor, 2001). This is certainly the case in Dumfries & Galloway where 70% of land is classified as agricultural and a further 25% is under forestry or woodland. Another potential distinction is that rural areas tend to be the main storehouses of ecological diversity (Lane, 1994a), a fact that is reflected in the large number and extent of conservation designations in rural areas. However, sites of conservation value, although less in number and perhaps smaller in scale, are also located within urban areas (Gilbert, 1991). As for the economy, Lane (1994a) notes that rural economies will be strongly influenced by the market for farm and forest products and, despite a declining labour force (Ilbery and Bowler, 1998), will still show a strong bias towards jobs in the agriculture or forestry sector. Lane also notes that there is often a shortage of employment opportunities for women in rural areas, however the development of new service sector industries such as tourism have provided more employment opportunities in recent decades. Fundamentally, the rural/urban dichotomy in terms of economic activity is becoming less clear, not just because of regression in the relative importance of agriculture, but also in the growth of Information Technology and the post-industrial service sector leading to new industries, including tourism, being developed in rural areas (Roberts and Hall, 2001).

By the early 1990s rural geographers such as Hoggart (1990) were calling for an abandonment of the term rural on the basis that it was a confusing and chaotic concept, lacking in explanatory power. However, because people still describe themselves as rural, refer to the rural environment as a real space, and visit and take holidays in the countryside, it remains an important concept. Halfacree (1993) identified an alternative post-structuralist approach to defining the rural which initially does not require the abstraction of causal structures operating at the rural scale.<sup>4</sup> This new social representation approach to defining the rural stems from the observation that "the rural and its synonyms are words and concepts understood and used by people in everyday talk" (Halfacree, 1993:29). This shifts attention from statistical features of rural areas to the people who live there and visit it and therefore leads to various 'lay discourses' of rurality (Jones, 1995). "Attention turns to how the

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<sup>4</sup> Post-structuralist interpretations typically view culture as integral to meaning.

rural is perceived” and “emphasis is placed on how the occupants of rural spaces construct themselves” (Ilbery, 1998:3). In this social constructionist approach, an area does not become rural because of its economy or population density or other structural characteristics, but because the people who live there or visit and use it think of it as being rural (Halfacree, 1995; Woods, 2005).

In the context of tourism, Sharpley and Sharpley (1997b) suggest that descriptive accounts, although important in achieving internationally accepted criteria of rurality, are less important in comparison to the contrast between the tourists’ (usually urban) home environment and the characteristics of the destination which mark it as rural. These commentators suggest that sparsely populated areas are more attractive to tourists owing to the stark contrast with the places they normally reside, and are therefore defined or recognised as rural.

A single all-encompassing definition of the rural is therefore unachievable, and so too is a complex definition of ‘rural tourism’ (Lane, 1994a; Roberts and Hall, 2001; Sharpley and Sharpley, 1997b; Sørensen and Nilsson, 2003). Rural areas are difficult to define which logically prohibits a generic definition of rural tourism. Furthermore, urban/resort tourism may spill-out into adjacent rural areas, and not all tourism which takes place in rural areas can be considered strictly rural (Lane, 1994a). A generic definition of rural tourism is further complicated when one considers that different forms of rural tourism have developed in different regions. For instance, farm-based tourism is an important form of rural tourism in many countries of rural Europe but is much rarer in rural USA and Canada (Weaver and Fennell, 1997). Likewise some forms of rural tourism such as adventure and high adrenaline tourism are often associated with countries like New Zealand and Australia (Cater and Smith, 2003; Cloke and Perkins, 2002) but are less commercially developed in rural areas of Scotland and Ireland at the present time.

A further difficulty arises from the fact that rural areas are in a complex process of change (Lane, 1994a). For example, some areas are still experiencing depopulation while others have seen a reversal of this. The once clear distinction between urban and rural has been blurred by suburbanisation, long-distance commuting and second-home development. Despite the complications that render any generic definition of



rural tourism obsolete, and the obvious criticisms with regards to terminology, Lane (1994a:14) argues that rural tourism in its 'purest' form should be:

1. Located in rural areas [however defined]
2. Functionally rural – built upon the rural world's special features of small-scale enterprise, open space, contact with nature and the natural world, heritage, 'traditional' societies and 'traditional' practices.
3. Rural in scale – both in terms of buildings and settlements – and, therefore, usually small-scale.
4. Traditional in character, growing slowly and organically, and connected with local families. It will often be very largely controlled locally and developed for the long-term good of the area.
5. Of many different kinds, representing the complex pattern of rural environment, economy, history and location.

It has not been the intention of this section to define rural or rurality but to introduce the reader to the complexity of the area in which touristic consumption takes place. It is argued here that the most important features that make the rural a special place for tourism are best described by visitors to this environment.

### *2.2.3 Growth in rural tourism: traditional and new uses*

At the outset of this thesis it was suggested that tourism and recreation in rural areas is fundamental for many communities, this includes the study region of Dumfries & Galloway, south-west Scotland. Drawing on Butler's (1998) theoretical account a number of interrelated factors have coalesced which help explain why rural areas have become important venues for tourism and recreation. The first of these factors is the growth in participation among western societies following the Second World War. This global growth in tourism participation has been facilitated through a combination of well-documented forces including increased affluence, increased personal mobility, changes in the work schedule, greater amounts of leisure time and technological innovations creating greater opportunities for leisure (Butler, 1998; Glyptis, 1992; Holden, 2000; Mowforth and Munt, 1998). Butler (1998) claims that these factors have produced two major changes in rural areas: increased participation

in most established or 'traditional' forms of leisure in the countryside; and participation in an assortment of new forms of leisure, often with very rapid growth rates.

'Traditional' refers to relaxed, relatively passive and nostalgia-related activities such as picnicking, walking, sightseeing, visiting historic sites, fishing, landscape photography and nature study. These activities are viewed as being closely related to the character of the setting (Butler *et al.*, 1998; Roberts and Hall, 2001). In addition to traditional forms of leisure with their emphasis on a change of pace, setting and links to a bucolic rural image, new forms of leisure are thought to be much more related to urban existence, lifestyle and consumption (Butler, 1998). These more active, sometimes technological, modern, individual, competitive, fast, fashion-related and perhaps even 'egotistical' (Wheeller, 1992) forms of tourism include jet-skiing, mountain biking, snow-boarding, endurance sports and other similar activities (Butler, 1998). Various researchers have suggested that these contemporary tourism trends have highlighted that tourists are searching for more than relaxation and a visual canvas in their quest for authentic and meaningful experiences (Cater and Smith, 2003; Hawkins and Lamoureux, 2001). Cater and Smith (2003:196) assert "The growth in new forms of special interest tourism emphasises that the contemporary, reflective tourist is on a quest to participate in a broad range of embodied tourism experiences", the motivations for which, according to Weiler and Hall (1992), are premised upon enhanced physical well-being, social contact, risk-seeking and self-discovery resulting from the experience. With increasing consumption of the countryside for traditional and new forms of tourism and leisure comes a need to manage change in a sustainable manner.

### **2.3 Sustainable rural tourism development, initiatives, policies and institutions in Scotland and Dumfries & Galloway**

In the last twenty years or so, the theoretical concept of sustainable tourism development with its three general principles, namely, the conservation of natural resources, long-term planning, and more equitable global share of resources and opportunities, has been promoted as the ideal model not only for tourism but most

industries (Sharpley and Sharpley, 1997a). This has resulted in the creation of various sustainable principles and goals of tourism development such as 'Agenda 21 for the Travel & Tourism Industry'<sup>5</sup> and the promotion of 'alternative' forms of tourism such as ecotourism. Developed from the wider concept of 'sustainable development' discussed below, "Sustainable tourism aims to minimise environmental and cultural damage, optimise visitor satisfaction, and maximise long-term growth for the region. It is a way of obtaining a balance between the growth potential of tourism and the conservation needs of the environment" (Lane, 1994b: 102). By 'alternative', one is referring to activities or services that are small-scale, locally owned, low impact with low revenue leakage outwith the area (Holden, 2000). These contrast with large-scale multinational concerns typified by high revenue leakages which characterise mass tourism (Cater, 1993).

The concept of sustainable development has been defined as development that meets the needs of the present human generation without compromising the ability of future generations to meet their own needs (WCED, 1987). This concept first gained prominence through the World Conservation Strategy (IUCN *et al.*, 1980) and was greatly boosted by the report of the World Commission on Environment and Development (1987) entitled 'Our Common Future'. The concept gained widespread attention following the United Nations Conference on Environment and Development (UNCED), which was held in Rio de Janeiro in June 1992. The concept of sustainable development captured a number of different concerns associated with the way that governments and private businesses were achieving economic growth at the expense of biodiversity and the natural resource base, and also raised concerns of over the unequal distribution of wealth and resources between developed and less developed nations. In terms of environmental resources, sustainable development advocated a conservation approach to resource use to ensure that future generations have the ability to develop in the same way that present and past generations have developed. Some of the major international

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<sup>5</sup> In 1991, the Department of the Environment (UK) launched a set of guiding principles for sustainable tourism development in their publication *Tourism and the Environment: Maintaining the Balance*. Following on from the Earth Summit (1992), three international organisations - the World Travel & Tourism Council (WTTC), the World Tourism Organization (WTO) and the Earth Council joined together to launch an action plan entitled *Agenda 21 for the Travel & Tourism Industry: Towards Environmentally Sustainable Development*. This document provided a list of guiding principles of sustainable tourism.

agreements reached at the Earth Summit included a Convention on Biological Diversity, a Framework Convention on Climate Change, Forest Principles, the Rio Declaration of 27 principles, and Agenda 21. Agenda 21 was the action plan adopted by participating countries which lays out basic principles required to progress towards sustainability. It aimed to promote national sustainable development strategies, involving local communities and others in a 'bottom-up' approach to development (Holden, 2000).

Tourism stakeholders have taken the wider concept of sustainable development and adapted it for use in a tourism concept. For example, the Department of the Environment in the UK published some guiding principles of sustainable tourism in the early 1990s which promoted the idea that the environment has intrinsic value outweighing its value as a tourism asset: "Its enjoyment [the environment] by future generations and its long-term survival must not be prejudiced by short-term considerations" (cited in Holden, 2000: 176). Another sustainable development principle adapted for a tourism context is the idea of long-term planning: "The relationship between tourism and the environment must be managed so that the environment is sustainable in the long-term. Tourism must not be allowed to damage the resource, prejudice its future enjoyment or bring unacceptable impacts" (cited in Holden, 2000: 176). A more recent practical example of how tourism stakeholders in Scotland have attempted to embrace sustainable development ideology is through the creation of the Green Tourism Business Scheme (GTBS). This scheme is given greater attention in a later section.

Rural areas in particular have featured significantly in the development of sustainable tourism principles (Bramwell, 1994). As outlined in the introduction of this thesis, many rural areas have been facing a number of problems and tourism has been encouraged by governments as a way of addressing some of these difficulties. Given that rural areas are valued for their landscapes, habitats, biodiversity and cultural heritage, and that tourism development results in economic, social and environmental change, it is important that tourism is managed in a sustainable manner. Furthermore, rural areas are frequently symbolised as retaining what has been lost in contemporary urban living (i.e. elements of the rural idyll), and are thus considered worthy of protection (Bramwell, 1994). The rural environment, according to Lane (1994b), is

fragile and easily either modified, damaged or both by rapid transformation. Tourism is a powerful agent for change and therefore the case for sustainable rural tourism is strong. The following holistic principles which move beyond a purely environmental focus, have been proposed by Lane (1994b: 103) as a framework of idealised facets of sustainable rural tourism. These, of course, are more easily stated than achieved.

1. Sustain the culture and character of host communities.
2. Sustain landscape and habitats.
3. Sustain the rural economy.
4. Sustain a tourism industry which will be viable in the long term - and this in turn means the promotion of successful and satisfying holiday experiences.
5. Develop sufficient understanding, leadership and vision amongst the decision-makers in an area that they realise the dangers of too much reliance on tourism, and continue to work towards a balanced and diversified rural economy.

For some analysts, the adoption of sustainable development principles stems from the fact that tourism is a fierce competitor for resources (McKercher, 2003). Additionally, the needs of tourists are often different from local residents and therefore serving tourists may not necessarily meet the needs of indigenous communities. Furthermore, tourism is sometimes forced on local communities, especially rural communities, at levels and speeds which cause social disruption. Although sustainable tourism principles are often vague, one practical solution is to create 'sustainable management and development strategies' (Lane, 1994b). These plans differ from conventional tourism strategies that are dominated by growth, capital investment and marketing.

According to Lane (1994b) the hallmarks of sustainable rural tourism plans include an analysis of an area's social, economic, ecological and cultural needs, and of the assets and constraints on future tourism development. Strategies should include a discussion on how tourism can aid regeneration, and should endorse a bottom-up approach facilitating local participation in the planning and ongoing decision making processes. Local groups should be established to monitor, advise and assist in the future management. The suitability of developments ought to be considered against the type of locality with special attention paid to protected areas and fragile

ecosystems, which may include an assessment of visitor carrying capacities. Opportunities for development and marketing should be based on the results of good market research, and training opportunities for businesses and employees should be identified. Lane (1994b) also suggests that sustainable management and development strategies should promote quality assurance schemes, which help improve customer care, encourage repeat visits and provide product transparency. Sustainable development strategies should also encourage discussion on alternative ways to broaden the regional economy to avoid total reliance on tourism. Special attention should be paid towards supporting farmers whose role as 'guardians of the landscape' is fundamental in attracting visitors in the first place. Lastly, sustainable rural tourism strategies should be long-term (5 – 10yrs) while simultaneously needing to list priorities to be completed on an annual basis as they arise. The targets set should be quantifiable and evaluated on a regular basis, and objectives should be up-dated. These serve as a useful checklist of items for assessing whether a rural regions tourism strategy is sustainable in its outlook.

### *2.3.1 Sustainable rural tourism initiatives in Scotland and Dumfries & Galloway*

Scotland does not have a specific sustainable tourism strategy document *per se* or even a separate national rural tourism strategy, although it does have an industry-led 'Sustainable Tourism Partnership' (STP) (re-branded in 2006 from its previous incarnation as the Tourism and Environment Forum, before which it was known as the Tourism and Environment Task Force) who are responsible for promoting sustainable tourism initiatives. This is not an organisation that is specifically geared towards rural tourism development although many of their achievements have been in this area. The STP includes private industry partners, the Scottish Executive, and organisations such as VisitScotland, the Enterprise Networks, local authorities, Scottish Natural Heritage (SNH), Historic Scotland and the National Park Authorities. The current aim of this partnership is "to bring long term business and environmental benefits to the Scottish tourism industry through encouraging sustainable use of our world class natural and built heritage".<sup>6</sup>

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<sup>6</sup> [www.greentourism.org.uk/aboutus.html](http://www.greentourism.org.uk/aboutus.html)

The STP has its roots in the Scottish Tourism Co-ordinating Group (STCG) which was created by the Scottish Office following criticism over the fractional and fragmented nature of the organisational structure of Scottish tourism (MacLellan, 1997). The STCG emphasised collaboration, partnership and joint initiatives corresponding with the holistic premise of sustainable development. Their first report in 1992 emphasised the economic significance of Scotland's countryside for tourism and also the costs/impacts of tourism on the environment.<sup>7</sup> MacLellan (1997: 311) explains that the solution to reducing environmental costs was presented as 'the adoption of sustainable tourism aims and priorities', that were to be identified and achieved through the formation of a 'Tourism Management Initiative' (TMI) connecting national priorities with local projects.

For financial reasons TMI projects never materialised and the STCG reconvened in late 1992 to form the Tourism and Environment Task Force (TETF). TETF's objectives included increasing awareness and the importance of the environment for tourism among stakeholders. This led to a report called *Going Green: Guidelines for the Scottish Tourism Industry* (TETF, 1993a). This report acknowledged that the environment is Scotland's major asset in attracting visitors and hence it must be treated, developed and promoted sustainably. This document provided some practical guidance on how to develop a green image and create products in response to a perceived growing green market (MacLellan, 1997). Like most of the literature produced by this partnership, a tenuous link is made between a perceived increasing green consumer market and the way that visitors value Scotland's landscape and natural heritage without providing any firm evidence of green/biocentric/ecological orientations of visitors. While it is undisputed that repeated visitor surveys show Scotland's scenery and countryside to be fundamental elements for attracting visitors<sup>8</sup>, this does not mean that consumers are necessarily demanding more environmentally friendly products while on holiday, nor does it suggest that visitors hold pro-ecological views. Appreciation of landscape is not an automatic indicator of ecological values nor of environmentally sensitive behaviour.

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<sup>7</sup> *Tourism and the Scottish Environment: A Sustainable Partnership* (Scottish Tourism Co-ordinating Group, 1992)

<sup>8</sup> See VisitScotland's corporate website for a range of visitor attitudes surveys conducted since 1999: [www.scotexchange.net/research\\_and\\_statistics/tourism\\_today/visitor\\_attitudes.htm](http://www.scotexchange.net/research_and_statistics/tourism_today/visitor_attitudes.htm)

As MacLellan (1997) explains, another main objective of the TETF was to draw-up guidelines, based on values of sustainability, to be implemented in projects at the local level by tourism representatives from the public and private sectors. This resulted in a publication called *Tourism and the Scottish Environment: Tourism Management Initiative* (TETF, 1993b). This presented examples of different approaches to sustainable tourism development, but retained a focus on the cooperative stages required to establish Tourism Management Programmes (TMPs). TMPs are similar to the sustainable management and development strategies cited by Lane (1994b), where community involvement, long-term planning, networking, cooperation, pooling resources and expertise are considered fundamental. TMPs are concurrent with national sustainable tourism priorities and unite with other national industry working groups dealing with issues such as training (e.g. Enterprise Companies), activity holidays, seasonality, the arts and visitor attractions (MacLellan, 1997). There are currently around nine TMPs and related projects operating throughout Scotland many of which are located in rural areas, albeit none in the study region of Dumfries & Galloway. Most of the TMPs have been functioning for more than ten years, and MacLellan (1998) provides some evidence to suggest that some local projects are losing direction. This contrasts with the claims of the Sustainable Tourism Partnership who cite success in places like Nairn, St. Andrews, the Trossachs, Pitlochry and Calanais on the Isle of Lewis.<sup>9</sup>

TMPs are not the only initiative developed by the newly renamed Sustainable Tourism Partnership. They appear to have been successful in facilitating the development of sustainable codes of conduct and accreditation schemes for marine ecotourism in the Minch and the Moray Firth, helping to establish Caithness as a sustainable nature-based tourism destination, and holding conferences to promote and bring together Scotland's nature-based tourism industry to share ideas. This partnership has also played an important role in the provision of market research on wildlife tourism in Scotland, and published research on training needs for wildlife and tourism operators which aims to promote a better informed industry and more enjoyable experiences for visitors. Other publications such as the *Going Green Handbook* (TETF, 1997) and *Greening Scottish Tourism - Linking Scotland's Built &*

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<sup>9</sup> [www.greentourism.org.uk/Default.aspx?LocID=008003006003&htm](http://www.greentourism.org.uk/Default.aspx?LocID=008003006003&htm)



*Natural Heritage* (TEF, 2004b) provide case studies and demonstrate cost-savings from developing more sustainable practices.

Another programme developed and launched by the Sustainable Tourism Partnership is the Green Tourism Business Scheme (GTBS). This scheme was first envisaged following research that reviewed existing environmental management approaches in the hospitality sector (Wallis and Woodward, 1997). Essentially, the GTBS is an environmental management scheme accredited by VisitScotland. The aim is to help tourism businesses, mainly accommodation and visitor attractions, reduce their environmental impact. At the time of writing, businesses joining the GTBS pay an initial joining fee plus an annual fee for which they receive an environmental audit (repeated every two years) that can then be used as a strategy for reducing their adverse environmental impacts. The scheme awards businesses one of three awards depending on their current level of environmental management. The GTBS is apparently one of the best known environmental management schemes for tourism in Europe (Leslie, 2001), although participation in the scheme appears proportionally quite low with only 500 registered businesses out of 4,871 accommodation establishments and 510 paid visitor attractions (the number of 'free' visitor attractions in Scotland could not be ascertained) (Garrod *et al.*, 2002).<sup>10</sup> Nevertheless, it does represent a move towards sustainable tourism development, at least in the accommodation and visitor attraction sectors, and it also provides a simple sustainable development indicator from which to measure progress (Blackstock, 2006). This said, there are barriers to its success which will be outlined further when discussing the specific case of Dumfries & Galloway.

At a regional level in Dumfries & Galloway there has been a number of what might be considered sustainable tourism and development initiatives including the regeneration of Wigtown through the creation of Scotland's National Book Town (Seaton, 1997) and more recently the re-branding of Castle Douglas as a food town (Macleod, 2002). Another recent example is the 'Making Tracks' project that began

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<sup>10</sup> Registered establishment figures for Scotland were obtained via [www.staruk.org.uk](http://www.staruk.org.uk).

in June 2002 and ended in December 2005. This project was initially funded<sup>11</sup> by the Scottish Executive (£300,000) through VisitScotland following the Foot-and-Mouth Disease (FMD) epidemic that affected both farmers and tourism businesses throughout the south of Scotland in 2001. One source suggests that £65 million was lost due to the reduction in tourist revenue during the outbreak (Dumfries & Galloway Standard, 22 August 2003). The objectives of the Making Tracks project were to (George Street Research, 2006):

1. Improve links between tourism business, farming and the environment
2. Identify opportunities for enjoying at first hand the region's natural habitats, flora and fauna
3. To enhance the experience of visitors to the area through improved access, interpretation and products
4. To contribute to the region's economic regeneration
5. Establish and share best practice in the development of sustainable nature based tourism.

Demonstrating a holistic approach, the project was managed by a project management group comprising the Area Tourist Boards (VisitScotland Dumfries & Galloway and VisitScotland Scottish Borders), the Councils, Enterprise Companies, Scottish Natural Heritage (SNH), and NFU Scotland. An additional fifteen advisory bodies made up a steering group. A dedicated Project Officer was appointed who was line managed by VisitScotland Dumfries and Galloway, the lead partner. The scheme, which provided grants of up to 50%, was specifically aimed at encouraging farmers and other land-based businesses to work together with mainstream tourism businesses and other organisations in order to develop a network of sustainable nature-based tourism products across the south of Scotland.

Among the twenty projects created (ten in Dumfries & Galloway) are the Galloway Red Kite Trail (Plate 2.2) and feeding station on a farm near Laurieston, a new visitor centre and path networks on the Colvend coast and the creation of a new nature reserve near Moffat. According to a recent independent report the Making

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<sup>11</sup> Leader+ funding through both Dumfries and Galloway (£138,317) and Scottish Borders (£98,317) was subsequently provided to enhance the scale and benefits of the grant scheme and to extend the life of the project from two to three years.

Tracks project has surpassed most initial expectations (George Street Research, 2006). With regards to increasing collaborative activity amongst farming and tourism businesses, the initial expectation was to create six new ventures, however thirty-one were achieved and a further fourteen anticipated. The number of new marketing and promotion initiatives imagined was twelve and this was also exceeded.



**Plate 2.2**      **The Galloway Red Kite Trail**

In terms of visitor numbers, it was thought that the anticipated six new projects would bring an extra 12,000 visitors to the south of Scotland, however with more visitor attractions created the actual number of new visitors has been estimated at 46,477 (George Street Research, 2006). Additionally, sixteen new management initiatives have been created, eight businesses achieved accreditation under the Green Tourism Business Scheme, thirty training opportunities were created, twenty-nine farm businesses have received assistance; an estimated £1.6 – 1.8 million in revenue will be created, fourteen direct jobs created; and eighty-five additional local businesses benefited from the projects (George Street Research, 2006).

As a sustainable rural tourism initiative it would appear that the Making Tracks project has been successful in southern Scotland, however as suggested by Lane (1994b), one needs to take a long-term view of these projects and since these projects have only been in existence for a short time it is perhaps premature to suggest they are truly sustainable. A recent report suggests the Galloway Kite Trail generates an estimated £750,000 per year for the local economy, thus providing an incentive to develop more nature-focused attractions and at the same time justifying a robust conservation effort to conserve the region's natural assets.<sup>12</sup> One barrier that may limit the sustainability of the Red Kite Trail attraction is the deliberate poisoning of raptors. Unfortunately, not all land managers view wildlife resources as valuable assets and in 2003 three red kites were found poisoned near Laurieston.<sup>13</sup> Incidents like these form one of the biggest threats to the successful development of sustainable nature-based tourism in Dumfries & Galloway, and demonstrates that conflict between species of high conservation value and species of economic value to estate managers continue to be an issue.

### *2.3.2 Sustainable rural tourism policies and key stakeholders*

As indicated previously there is no specific national rural tourism strategy in Scotland, although the new national tourism strategy integrates many elements of sustainable tourism that are appropriate in a rural context. Scottish tourism policy is directed through the Scottish Executive, whose most recent ten-year national tourism strategy was published in 2006. VisitScotland is the national body responsible for delivering the tourism aims of the Scottish Executive. VisitScotland also exists to advise the industry on market trends, operate quality assurance schemes, advise government on tourism development and support the network offices (Burnside and Wakefield, 2003). The network represents a number of 'hubs' across Scotland, of which there are 14 including VisitScotland Dumfries & Galloway. These network hubs develop their own regionally specific tourism strategies reflective of the wider policy objectives of the national tourism policy. They represent an Area Tourism Partnership of key agencies including, in the case of Dumfries & Galloway,

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<sup>12</sup> [http://news.bbc.co.uk/1/hi/scotland/south\\_of\\_scotland/5286650.stm](http://news.bbc.co.uk/1/hi/scotland/south_of_scotland/5286650.stm)

<sup>13</sup> <http://news.bbc.co.uk/1/hi/scotland/2985915.stm>

VisitScotland Dumfries & Galloway, Dumfries & Galloway Council, Scottish Enterprise Dumfries & Galloway, Scottish Natural Heritage (SNH), Historic Scotland (HS), the National Trust for Scotland and Forest Enterprise, each of which is given responsibility for leading the development of tourism in their own general and specialised areas of interest. For example, as the Scottish Executive's economic development agency Scottish Enterprise are involved in job creation and retention, training, transport and economic development of tourism at both national and local levels (Scottish Enterprise, 2004/05). Scottish Natural Heritage (SNH) is responsible for Scotland's landscapes and biodiversity, and also facilitating the enjoyment, access and sustainable use of these resources including the provision of tourism and recreation. SNH does not appear to have an explicit policy on tourism; however this government advisory body clearly supports the idea of sustainable development.<sup>14</sup> Recent policy successes related to tourism include the creation of two National Parks in Scotland and the development of new Access Legislation. It is outwith the scope of this section to discuss all the potential sustainable tourism policies from the aforementioned agencies and therefore attention is given to the main policy maker – the Scottish Executive.

Like most other national tourism strategies (MacLellan, 1997) a key policy objective of Scotland's new national tourism strategy is economic growth. In fact, the Scottish Executive have set a target of 50% revenue growth by 2015 (Scottish tourism is currently worth around £4.2 billion, VisitScotland, 2006) which is to be achieved by increasing visitor numbers by 20% (In 2005 over 17 million tourists took overnight trips to Scotland) and by encouraging these visitors to spend more. However, unlike the previous national tourism strategies (Scottish Executive, 2000, 2002) the idea of sustainable tourism development receives considerable attention.

The Scottish Executive (2006a: 38) suggest that sustainable tourism "in its purest sense is an industry which attempts to make a low impact on the environment and local culture, while helping to generate income, employment and the conservation of local ecosystems. It is responsible tourism, which is both ecologically and culturally

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<sup>14</sup> See: *Sustainable Development and the Natural Heritage: The SNH Approach*. Policy Statement No 02/01, March 2002. Available at: [www.snh.org.uk/pdfs/polstat/susdev\\_NH.pdf](http://www.snh.org.uk/pdfs/polstat/susdev_NH.pdf)

sensitive. **We want to be Europe's most sustainable tourism destination**" (original emphasis). The Scottish Executive acknowledges that the growth target has to be achieved in a sustainable manner and aims to achieve this growth "by growing value faster than volume" (p.15). It is suggested that volume growth of 2% per year should not create any sudden capacity problems, especially if some of it happens away from the busiest areas and outside peak seasons, therefore potentially benefiting rural communities.

This policy document makes repeated reference to developing tourism outwith the traditional peak tourism periods by encouraging activities such as wildlife tourism and therefore encouraging businesses to stay open all year. This in turn may encourage staff retention and thus provide further benefits to local communities. Reference is also made to the role that tourism can play in transforming neglected and deprived communities and it is suggested that Area Tourism Partnerships will work to ensure that tourism engages with local communities and provides benefits for them (Scottish Executive, 2006a). It is suggested that initiatives such as the Scottish Executive's farm diversification schemes are already making a real difference by assisting the creation of tourism businesses in rural areas, although this has yet to be tested in any formal way.

The Scottish Executive also concedes that there is a need for sustainable forms of transportation, although there is little indication of how this will be achieved. This is of paramount importance for most rural regions in Scotland where current infrastructure and transport links are poor and visitors are encouraged to travel using relatively unsustainable means of personal transportation. The Sustainable Tourism Partnership also recognise this as a major barrier to sustainable development: a point reflected in their policy statement outlining seven key aims towards sustainable tourism in Scotland (Table 2.4). Roberts and Hall (2001) believe that the transport issue alone has the power to 'demolish' tourism's claims of, or aspirations, towards, sustainability.

**Table 2.4 Seven key aims for sustainable tourism in Scotland**

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For Scotland to develop a more sustainable tourism industry the Forum recommends that tourism planners and businesses pursue the following aims

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1. A more even spread of visitors throughout the year
2. More tourism businesses actively enhancing and protecting the environment, for example by joining the Green Tourism Business Scheme (GTBS)
3. Greater investment in tourism people and skills
4. A better integrated quality tourism product that meets visitors' demands and expectations and encourages them to stay longer and spend more
5. A clearer understanding of tourism's impacts
6. Greater involvement of communities in tourism planning, development and marketing
7. Greater use by visitors of Scotland's public transport system

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(Source: TEF, 2004a)

In fact, many of TEF's aims are integrated within the Executive's new national tourism strategy including the need to develop off-peak tourism, a focus on quality tourism products and better investment in skills development. A link between quality assurance and environmental management is also a key policy objective of the Scottish Executive who suggest that "From 2015, all businesses wishing to work with VisitScotland will have reached at least entry level of GTBS" (p.41). It is probably a fair assessment to suggest that this most recent national tourism strategy is by far the most environmentally sustainably-orientated tourism policy document to date. The integration of sustainable tourism initiatives and priorities within the main guiding strategy for Scottish tourism is arguably more positive than developing a separate sustainable tourism strategy which may be viewed as an 'add-on'.

At the regional level, VisitScotland Dumfries & Galloway are operating currently on a tourism development strategy that will shortly end its five-year operational timeframe. At the time of writing there was no new regional strategy from which to assess how the sustainable tourism policies in the national strategy are to be implemented at the regional scale. The current Dumfries & Galloway Area Tourism Strategy (DGATS) lists a number of key principles including the positioning of the region as a primary destination for environmentally friendly tourism or ecotourism. Four strategic policy aims are evident including "to implement focused, cost-effective strategies for integrated product development and marketing" (DGATB, 2001: 14). Under this aim VisitScotland Dumfries & Galloway propose to create five

niche product marketing initiatives including cultural/heritage breaks and holidays, walking breaks and holidays, cycling breaks and holidays, golfing holidays and garden tours. The development of these niche products is perhaps in recognition of wider trends which suggest that visitors are seeking more specialised, embodied and interactive rural experiences (Cater and Smith, 2003).

The second strategic policy aim is "To build sustainable and competitive businesses, with enhanced management professionalism" (DGTB, 2001: 21). This focus on businesses includes the promotion of environmentally sensitive business practices such as support for the GTBS. Cooperation and networking are key themes of the strategy, and are considered to be fundamental for sustainable tourism development (Richards and Hall, 2000; Mitchell and Hall, 2005). The third aim of the DGATS is "To influence the development of infrastructure to enable the region to meet visitor needs and to compete effectively" (DGTB, 2001: 22). It is noted that "Tourism developments should be based on high standards of design and the principles of sustainability" (p.22). Under this aim integrative public transport within the region is promoted, at least to the main attractions, although there appears to have been little progress in this area. Another sub-aim is the conservation of natural resources and the monitoring of sites where tourism capacity is close to the carrying capacity. The strategy notes that some elements of the natural and cultural heritage offer particular ecotourism opportunities that have yet to be exploited including parts of the coast and the southern uplands. The vast areas of Forestry Commission land are considered in the strategy to have great potential for recreation and some progress has been made in utilising these resources since the strategy was launched. In partnership with numerous stakeholders in the region, Forestry Commission Scotland has recently launched the Galloway Forest Park Tourism Strategy, the first of its kind in Scotland, which sets out an agenda for tourism and recreation (Forestry Commission Scotland, 2006).

The final main strategic policy aim is "To develop systems for performance monitoring and evaluation, and knowledge management – for use by all the strategy partners and the industry" (DGTB, 2001: 25). In order to achieve this aim, the strategy proposes to promote VisitScotland's industry website ([www.scotexchange.net](http://www.scotexchange.net)) to businesses as a way of gathering information on tourism.



It is also proposed that experiences, information, best practice and benchmarking should be shared; this will be partly facilitated through tourism business networks.

Thus far, this review has provided a broad context for the discussion of rural tourism. Attention now turns to the two key themes in this thesis. Firstly the ecological attitudes of visitors will be discussed within wider theoretical and conceptual foundations. Then attention will turn to the literature relevant to farm-based tourism.

#### **2.4 Nature-related tourism experiences and environmental attitudes**

Reflecting a significant shift in public tastes and preferences for more rewarding, alternative and meaningful experiences, Butler (1998) singles out activities relating to nature and natural heritage as experiencing particularly rapid growth in the last thirty years. This opinion is clearly supported by the growing literature on nature-based tourism and ecotourism (Buckley, 2004; Cater, 1994; Ceballos-Lascuráin, 1996; Epler Wood, 2002; Fennell, 1999; Filion *et al.*, 1992; Hall and Boyd, 2005; Higham *et al.*, 2001; Honey, 1999; Newsome, 2005; Orams, 1995a, 1995b, 2001; Valentine, 1993; Wearing and Neil, 1999). Tourism based on wildlife is certainly not a new phenomenon in Scotland and dates back centuries (MacLellan, 1998). However, what is new about the current explosion of tourism and nature experiences is the focus on non-consumptive activities such as wildlife observation and nature photography. This marks a contrast to consumptive activities such as hunting, shooting and fishing that developed on sporting estates in nineteenth century (MacLellan, 1998). These consumptive activities still remain an important way of generating income for many estates in Scotland including some in Dumfries & Galloway (e.g. Lairdmannoch Estate, Buccleuch Estate). However, the wider benefits to rural communities are debateable.

The recent and rising popularity of activities related to nature and natural heritage has been theorized by Butler (1998) as reflecting the rise of widespread public interest in the environment in developed societies. Well-documented concerns for the environment began in the 1960s and 1970s as anti-growth sentiments fuelled by emerging problems of increasing chemical use, rapid population growth and

urbanisation, pollution, oil spills, nuclear technology, energy crises and natural resource depletion. These concerns coalesced on an international stage in the 1980s under the concept of 'sustainable development' (Barry, 1999; Mather and Chapman, 1995; Pepper, 1996). Although tourism was often regarded as a harmless activity, the smokeless and benign image of tourism development did not escape criticism in the 1970s (Turner and Ash, 1975). Loss of biodiversity and large-scale mass tourism developments were the focus of the early debates on tourism's relationship with the environment, however by the early 1980s this concern widened to incorporate social and economic issues (Fennell, 1999; Holden, 2000).

Researchers have noted that consumers in general are becoming more environmentally aware resulting in greater concern for the environment together with a desire to act more sympathetically (Ottman and Terry, 1997; Wight, 1993). The establishment and popularity of green political parties and increasing membership of conservation groups provide some evidence of growing environmental concern (Mather and Chapman, 1995; Roberts and Hall, 2001). The demand for expensive organic produce is perhaps another indication of growing environmental (and health) concerns. According to some researchers, green consumerism is impacting on tourism by creating a greater demand for environmental quality and products (Bramwell, 1994; Coccossis, 1996; Miller, 2003). Sharpley and Sharpley (1997a) note that surveys of consumer behaviour found that approximately 40% of UK adults always buy, or try to buy products which are thought to be environmentally friendly. Yet in terms of the consumption of tourism products there remains little proof of this high level of environmental engagement (Roberts and Hall, 2001). There appears to be little evidence of the rise of the "green tourist" as a real force in the UK tourism market (Swarbrooke, 1999: 26) which makes achieving sustainable rural tourism difficult.

As a loose term, which on the surface suggests a commitment to environmental concern, 'ecotourism', as a product, has experienced considerable growth in recent decades with some analysts suggesting global annual increases of 15 – 20% (Luzar *et al.*, 1998). In comparison, all global tourism has been growing at an average of 6.5%

since 1950.<sup>15</sup> It is therefore understandable that tourism officials in Dumfries & Galloway aim to position the region as an ecotourism destination in order to capitalise on this growth trend. However in terms of the numbers of people pursuing associated activities, ecotourism is still considered a speciality or 'niche' product indicating that the market is small in comparison to general rural tourism (Natural Capital Limited, 2002). This leads one to question whether this is an appropriate strategy for Dumfries & Galloway, although it depends if the motivation for positing the region as an ecotourism destination is based on increasing numbers or genuinely attempting to provide a more sustainable form of rural tourism. There is a lack of reliable data on the size of the ecotourism market because different actors measure ecotourism activity in different ways (Burton, 1997). Equating visitors who suggest that 'nature study' is the main purpose of their trip with 'dedicated ecotourists' the market in Scotland represents approximately 1.8% of all holiday trips (VisitScotland, 2004b) although this does not assume that the former hold high pro-ecological attitudes. This figure does not include day-trippers, of which there appear to be no comparable data available relating specifically to nature-focused activities. By comparison, visitors who undertake nature study as part of a broader holiday experience, which may include many visitors to rural areas, represent around 17% of all 11.4 million holiday trips to Scotland (VisitScotland, 2004b).

The concept of ecotourism can also be described as philosophy which, according to some commentators, developed "as a consequence of the dissatisfaction with conventional forms of tourism [mass tourism] which have, in a general sense, ignored social and ecological elements of foreign regions in favour of a more anthropocentric and strictly profit-centred approach to the delivery of tourism products" (Fennell, 1999: 30). The origins of ecotourism ideology therefore appear to be firmly rooted within ecocentric models of tourism development. However, the concept of ecotourism has lost some of this ideology and has been hijacked by some tourism marketers to promote various nature related activities and products that do not necessarily endorse sustainable or ecotourism principles (Sasidharan and Font, 2001). It would appear that ecotourism is a contested concept, but this should not detract from attempting to achieve the sound principles behind the concept.

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<sup>15</sup> World Tourism Organization: [www.world-tourism.org/facts/menu.html](http://www.world-tourism.org/facts/menu.html)

There is no commonly accepted definition of ecotourism (Cater, 1994; Roberts and Hall, 2001), although Ceballos-Lascuráin (1987:14) defines ecotourism as travel to “relatively undisturbed or uncontaminated natural areas with the specific objective of studying, admiring, and enjoying the scenery and its wild plants and animals, as well as any existing cultural manifestations (both past and present) found in these areas”. This thesis accepts this product focused definition in assessing ecotourism in a Dumfries & Galloway context. This definition describes ecotourism as a product, revealing where it is conducted, what is involved and the objects of interest. One could include those visitors to Scotland whose main trip purpose is ‘nature study’ under this definition. Arguably, it is the ‘trip specific objective’ or motivation to study, admire and enjoy the landscape, flora and fauna that differentiate these nature-focused visitors from other rural tourists. But do these nature-focused visitors differ from general rural visitors in their pro-ecological attitudes? Can rural tourists be segmented based on environmental attitudes? Frochot (2005) notes that there has been relatively little research conducted on rural tourists themselves and this exploratory study aims to partly address this shortfall. As some researchers suggest, it may seem rational to assume that ecotourists have ‘green’ values but it may be a mistake to do so (Cater, 1994; Roberts and Hall, 2001). While no studies from the UK domestic market could be found, hence the important contribution of the present study, research from Australia revealed that the majority of potential ecotourists did not have particularly green values (Blamey and Braithwaite, 1997). It would appear that there is a lack of evidence to suggest that ecotourists or nature-focused visitors are motivated by or hold pro-ecological attitudes, but there is also a shortage of research measuring the ecological attitudes of rural tourists.

As a philosophy for tourism development, ecotourism is commonly conceptualised as a form of rural - wilderness tourism which is small-scale, locally-owned (not part of large chain of businesses where profits are taken out of the locality), has low negative environmental impacts, sustains communities, promotes a conservation ethic through educational facilities and is generally sustainable in its long-term management (Allcock *et al.*, 1994; Blamey, 2001; Harvey and Gillespie, 2003; Ross and Wall, 1999; The Ecotourism Society, 1991). With an emphasis on rural and ‘natural’ areas, various specific principles and goals have also been developed for guiding ecotourism development (Epler Wood, 2002; The Ecotourism Society;

Wight, 1994), some of which appear problematic in a UK context because of, among other things, the lack of true wilderness, an issue returned to in Chapter Five. Also worthy of mention here is Ryan et al's (2000) research whose study of ecotourists revealed that learning motives appear to be less important than passively gazing at some natural phenomena. Nevertheless, the ideological principles of ecotourism are admirable and if stakeholders are to market a region or activity as ecotourism then a concerted effort should be made to address the principles. In this thesis, it is the ideological principles that are interesting and how the study region meets, contradicts or can be adapted to the concept of a 'true' and transparent ecotourism.

Such is the perceived growth of ecotourism related activities that by 1990 nearly every non-industrialised country was promoting ecotourism as part of its development strategy (Honey, 1999). Still ecotourism does not appear to be a well-used term in Scotland, the UK or Europe as a whole. This leads one to question the appropriateness of using this terminology in Dumfries & Galloway, especially since some 97% of tourist trips to the region are made by domestic visitors (VisitScotland, 2004a). With the exception of Bulgaria where Europe's first national ecotourism strategy was launched in 2004, most other European countries including Scotland tend to speak about nature-based tourism, green tourism or sustainable rural tourism rather than ecotourism (Bjork, 2000; Bramwell, 1994; Fennell *et al.*, 2001; Lane, 1994b).

The literature provides us with some suggestions why ecotourism appears to be less well used as a concept or product in Europe. Firstly, some commentators have voiced growing scepticism over dubious 'eco-claims' made by marketers in order to gain custom in some parts of the world (Fritsch and Johannsen, 2004; Wight, 1994). There may as a result be some reluctance to adopt the pre-fix 'eco' in a European tourism context. Secondly, and probably more fundamentally, ecotourism is often associated with travel to relatively undisturbed or uncontaminated natural areas whereas much of Europe's rural landscape has been extensively modified through agriculture and forestry plantations (Blangy and Vautier, 2001). Most visitors to rural areas in the UK reside permanently in urban areas and, therefore, even a rural environment which is far removed from natural ecological succession, may appear to be 'natural' to these visitors. Additionally, ecotourism is often associated with

'small-scale' operations which suggest small groups of people (Fennell, 1999), however rural areas in the UK are visited by millions of people each year. While tour operators offering ecotourism experiences can restrict the number of people, most rural visitors in the UK are independent non-package travellers who may converge on the same natural attractions. Other than conservation management techniques such as restricting car parking spaces, charging for parking and restricting access points<sup>16</sup>, there are few other ways of keeping visitor numbers low, especially since most protected areas are free to access in the UK. Ecotourism therefore is a confusing concept and there remains no universal agreement on what it is, who is an ecotourist, if it is more sustainable than other forms of tourism (Cater, 1994).

Although visits to 'natural' areas can benefit rural businesses and communities economically (Roberts and Hall, 2001), it is important to note that a number of criticisms, in fact paradoxes, exist. Ecotourism is frequently associated with long-haul air travel, usually the movement of tourists from developed countries to less developed countries (Mowforth and Munt, 1998), and one major hypocrisy is that travel for ecotourism purposes consumes higher amounts of energy and omits higher levels of greenhouse gases associated with climate change. These global environmental problems have been shown to affect the composition, distribution and functioning of ecological communities and therefore ecotourism can paradoxically aid in negatively affecting the objects of most interest (Fields *et al.*, 1993; Sala *et al.*, 2000). By comparison, cars, although harmful, are less environmentally damaging in terms of the volume of pollution each creates (Johnson, 2003) although there are of course many more cars than planes and therefore overall the environmental impacts may be similar. Air travel has been identified as comprising upwards of 93% of the total ecological cost of a given tourism experience (Johnson, 2003). Ironically, as the popularity of ecotourism increases the environmental impacts of tourism will also increase leading one to question how sustainable ecotourism is when significant distances are involved to pursue this type of experience. While the high environmental cost through air travel is unlikely to be a factor for Dumfries & Galloway since most visitors are domestic, some 84% of these visitors do use private transportation to reach and travel around the region (VisitScotland, 2004a). This also

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<sup>16</sup> [www.exmoor-nationalpark.gov.uk/index/learning\\_about/learning\\_publications/questex\\_6.htm](http://www.exmoor-nationalpark.gov.uk/index/learning_about/learning_publications/questex_6.htm)

has an environmental cost, which to some degree is unavoidable in rural areas where public transport is poor and tourism services are fragmented. Even if an integrated and sustainable public transport system were created it is unlikely that domestic visitors would choose this over the convenience of private transport. This is a problem regardless of whether a location is being promoted as an ecotourism destination or not. Nevertheless, if Dumfries & Galloway is to justify its claim as an ecotourism destination then transportation issues need to be addressed.

A second paradox of ecotourism is the fact that increased visitation to 'natural' areas will place greater pressures on wildlife and the physical environment and can lead to disturbance and habitat degradation through trampling, noise and many forms of pollution (Anderson, 1995; Bowles, 1995; Buckley, 2004). Settings that are freely accessible to the public where entrance charges are neither practical nor acceptable are particularly susceptible to pressure (Tribe *et al.*, 2000). However potential degradation levels will depend on levels of visitation, the ways in which areas are actively managed in addition to the behaviour of visitors at ecologically sensitive sites. Educational facilities, that signpost appropriate behaviour, at ecotourism venues may encourage visitors to consider their potential impacts and help stem potential disturbance.

From an economic development perspective, one of the foremost benefits of developing ecotourism is the potential to spread and increase visitation levels throughout the year. The Sustainable Tourism Unit and the Scottish Executive have identified this as a key goal for achieving sustainable tourism in Scotland. The majority of domestic visitors and overseas visitors come to Dumfries & Galloway from July-September (VisitScotland, 2004a), however autumn, winter and spring are particularly good times for viewing wildlife. At Caerlaverock National Nature Reserve (NNR) in Dumfries & Galloway the annual migration of 20,000 Svalbard barnacle geese arriving in late September and staying until March brings thousands of visitors. One report suggests that 16,000 visitors come to Caerlaverock NNR each year, 75% of which visit during the months when the geese are present (Rayment *et al.*, 1998), therefore generating economic benefits outwith the traditional holiday period. While 70% of these visitors are day-trippers 25% are holidaymakers who stay in the region for an average of two nights. Ecotourism may therefore play a vital role

in extending the traditional tourism season and help to sustain the long-term viability of tourism in a given destination.

Another claimed benefit of ecotourism is the promotion of pro-environmental attitudes and behaviours through first-hand experience and environmental education (Beaumont, 2001). Interpretive material at tourism locations has been theorised and shown to increase visitor knowledge, which in turn can influence attitudes and ultimately behaviour (Orams, 1997). In many protected areas in Scotland such as National Parks, Local and National Nature Reserves the provision of interpretation is already well established, however there remains little research identifying what types of interpretation are most valued by visitors. This type of information can help managers of nature-focused attractions direct resources at developing appropriate interpretation material that can be used to promote pro-environmental attitudes.

There is little proof of tourists switching from private cars to public transport, or that tourists are insisting on sustainable practices in accommodation, and Roberts and Hall (2001:142) conclude that the evidence points to “the continuing unlikelihood of there being a rural tourism segment based on an interest in, and care of, the environment”. This observation does not bode well for VisitScotland Dumfries & Galloway’s vision of the region as an ecotourism or environmentally friendly destination. If ecotourists or nature-focused visitors are no more pro-ecological in their attitudes and behaviour than other visitors, as suggested by some commentators, then encouraging more visits to fragile environments could potentially lead to degradation and destroy the very assets which people come to view, enjoy and have embodied experiences with. This thesis sets out to ascertain whether this is likely by assessing the ecological attitudes of visitors to Dumfries & Galloway.

#### *2.4.1 Environmental attitudes and the New Ecological Paradigm (NEP)*

The 1970s appear to be a particularly productive epoch in the development of scales measuring environmental and ecological attitudes and concerns. This is perhaps not surprising given the elevated attention that environmental issues were receiving from the media and direct action groups. At the time of proposing his country specific



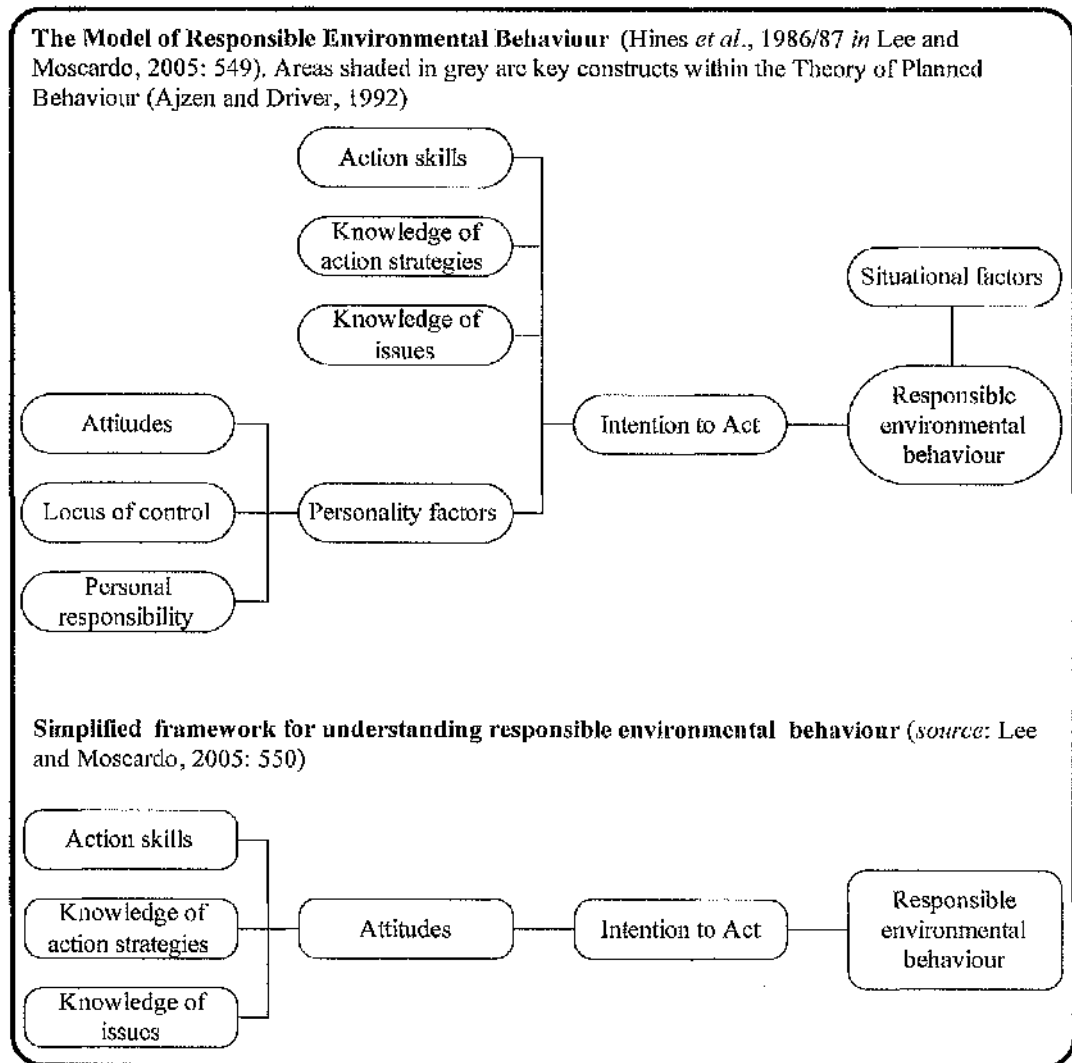
Australian Environmental Attitude Scale (AEAS) Ray (1975: 70) noted "Students of social movements have in recent years been presented with a bright new contemporary movement to study...we will need to gather data on just who the environmentalists are and how people in general feel about environmental issues". The importance of measuring environmental attitudes today is just as important, if not more so, than it was during the 1970s. This is especially true in relation to tourism which has continued to grow along with associated impacts. The importance of environmental attitude research partly stems from cognitive response theories such as the Theory of Planned Behaviour (Ajzen & Driver, 1992) which states that attitudes are based on values, range from the general to the specific, and predict future behaviours and intentions (Tarrant *et al.*, 1997). Expressions of positive pro-ecological or environmental attitudes among visitors to Dumfries & Galloway may therefore indicate responsible behaviour although the reverse may also be true. This is of particular significance as stakeholders wish to promote ecotourism.

Early theories of environmentally responsible behaviour suggested that knowledge was linked to attitudes, and attitudes to behaviour, therefore suggesting that if people became more knowledgeable about the environment and associated issues they would in turn become more responsive to problems and therefore be motivated to act more responsibly (Hungerford and Volk, 1990). Simplistic linear models have been criticised (see Cottrell and Graefe, 1997) and appear to have given way to more complex theories which include a range of variables that can influence an individual's responsible behaviour (Fishbein and Manfredo, 1992; McDougall and Munro, 1994). For example, Hines *et al.* (1987) found that knowledge of issues, knowledge of action strategies, locus of control<sup>17</sup>, attitudes and a sense of responsibility were all associated with environmentally responsible behaviour. These researchers proposed a model of predictors of environmental behaviour (Figure 2.1) which include key constructs (shaded) of the Theory of Planned Behaviour. Also included in Figure 2.1 is a simplified model proposed by Lee and Moscardo (2005).

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<sup>17</sup> Locus of control refers to an individual's perception of whether or not he or she has the ability to bring about change through his or her own behaviour.

**Figure 2.1 Models of environmental behaviour**



(Source: adapted from Lee and Moscardo, 2005: 550)

What both these models show is that attitudes are fundamental in leading to responsible environmental behaviour; however there are a number of other variables which also impact on this potential outcome. Situational factors may be extremely important in terms of tourism. Some studies have revealed that backpackers, who suggested they were reasonably environmentally conscious when at home, abandoned this level of responsibility while on holiday (Firth and Hing, 1999). This may reflect the hedonistic nature of tourism but perhaps also the fact that visitors will have limited knowledge of available services in a locality (c.g. recycling facilities). The models differ slightly, with Lee and Moscardo's model suggesting that attitudes

are a precursor to intentions to act whereas Hines et al's model suggests that attitudes inform personality factors. In both models an individual must possess knowledge of action strategies, knowledge of environmental issues, and skills in appropriately applying this knowledge to a given problem before any actions can be taken. These are seen as aiding pro-environmental attitudes, which as the models suggest, leads to an intention to act and ultimately responsible environmental behaviour. While progress towards sustainable tourism development is likely to depend on pro-environmental behaviours, the measurement of attitudes towards the environment is a fundamental step in establishing if visitors express precursor attitudes for realising this goal. Using Lee and Moscardo's model, attitudes are considered here to represent the sum of action skills, knowledge of environmental issues and action strategies.

There are numerous different scales used in the collection of environmental attitudes and concerns (see Dunlap and Van Liere, 1978a). Some of these have been developed for use in a specific location or circumstance while others have wider application. Among these is The Ecology Scale (Maloney and Ward, 1973), a set of one hundred and twenty-eight items (statements) addressing attitudes towards the environment.<sup>18</sup> Another is The Environmental Concern Scale (Weigel and Weigel, 1978), a sixteen item scale assessing concerns about conservation and pollution issues. Weigel and Weigel (1978) measured environmental attitudes among members of the Sierra Club (a conservation group in the USA) and a sample of the general public, concluding that the former, perhaps unsurprisingly, expressed greater concern for the environment. This scale demonstrated its usefulness by being able to distinguish between a known pro-environmental group and the general public.

Arguably the most frequently used scale in determining environmental attitudes is the New Environmental Paradigm (NEP) developed by Dunlap and Van Liere (1978b). It has been used with various populations across the globe including sheep farmers in Norway (Kaltenborn *et al.*, 1998), Chinese citizens in rural and urban areas (Chung and Poon, 2001), Washington residents and known environmentalists

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<sup>18</sup> The Ecology Scale was later reduced to thirty-five questions due to excessive length (Maloney *et al.*, 1975).

(Dunlap and Van Liere, 1978b). However, it is the use of the NEP in a tourism context that is of interest in this thesis.

It is essential to provide some context to the development of the NEP scale in order to appreciate what it measures. The conception of an environmental paradigm emerging as a replacement to the contemporary ruling social paradigm was first proposed by Pirages and Ehrlich (1974). A social paradigm has been defined as "a mental lens through which people [or groups of people] view the world and that enables them to understand what they see...an interwoven set of cultural beliefs and values that define what *is* and what *should be* in social life" (Olsen *et al.*, 1992:xv. original italics). This modern ruling social paradigm, known as the 'Dominant Social Paradigm' (DSP) is deemed to encompass: a belief in limitless resources, continuous progress, and the necessity of growth; faith in the problem-solving abilities of science and technology; and a strong emotional commitment to a laissez-faire economy and to sanctity of private property rights (Albrecht *et al.*, 1982:139). It is occasionally called the 'human exemptionalism paradigm', meaning that humans rule the physical world and are exempt from the laws of nature (Dunlap & Van Liere, 1984; Kaltenborn *et al.*, 1998).

Pirages and Ehrlich (1974) and others believed that, in contrast to the DSP, a NEP was emerging characterised by recognition that humans are part of nature, and that there are limits to physical growth and development. This belief was influenced by growing public concern for the environment and new radical economic theories of development promoting ideas such as 'steady-state economy' and 'limits to growth' (Boulding, 1966; Daly, 1968; Meadows *et al.*, 1972). As Eckersley (1990:70) notes "The essential difference between these two approaches is that the...[DSP]...values the non-human world only for its instrumental or use value to humankind (whether material or otherwise) whereas the [NEP] also values the non-human world for its own sake, irrespective of its use-value to humans". Essentially, the main eco-philosophical cleavage is the anthropocentric/ecocentric divide.

The DSP and NEP can be viewed dichotomously as two extreme positions although some view them as extreme poles on a continuum with a range of positions in-between (e.g. Colby, 1991; Grendstad and Wolleback, 1998; Milbrath, 1984; Olsen

*et al.*, 1992). Different typologies to these paradigms have been suggested, including catastrophists and cornucopians, vanguards and rearwards, technocentrism and ecocentrism, these essentially refer to the same DSP/NEP divide. Acott *et al.* (1998) provide a useful table showing relationships between different typologies of environmentalism and sustainable development, and also include their own typology specifically in relation to ecotourism (Table 2.5). These typologies, with the exception of ecotourism, are discussed in detail by Pepper (1996).

**Table 2.5 Relationship between different typologies of environmentalism and sustainable development**

Deep ecotourism		Shallow ecotourism		Mass tourism
Ecocentrism		Technocentrism		
Gianism	Communalism	Accommodation	Intervention	
Deep ecologists	Self-reliance, soft technologists	Environmental managers	Cornucopians	
New Environmental Paradigm (NEP)		Dominant Social Paradigm (DSP)		
Deep ecology		Shallow ecology		
Very strong sustainability	Strong sustainability	Weak sustainability	Very weak sustainability	

(Source: Acott *et al.*, 1998: 243)

Dunlap and colleagues set out to measure this change or endorsement of the NEP. Their most widely used scale (Dunlap and Van Liere, 1978b) which has now been updated and renamed 'The New Ecological Paradigm' (Dunlap *et al.*, 2000), originally comprised twelve Likert-scale questions which address three main facets of an environmental worldview, namely 'limits to growth', 'balance of nature' and 'anti-anthropocentrism'. The New Ecological Paradigm (NEP) has extended the number of facets measured to reflect contemporary environmental issues, and the scale now includes 'anti-exemptionalism' (drawing on the work of Julian Simon and other DSP defenders who suggest that humans are exempt from the forces of nature) and the likelihood of an 'ecocrisis' (reflecting global environmental issues such as ozone depletion, climate change, etc.) (Dunlap *et al.*, 2000). The New Ecological Paradigm now comprises fifteen Likert-scale statements addressing five facets of an ecological worldview (Table 2.6).

**Table 2.6 New Ecological Paradigm items and facets**

Facets	Do you agree or disagree that:
<i>Limits to growth</i>	1. We are approaching the limit of the number of people the earth can support
<i>Anti-anthropocentrism</i>	2. Humans have the right to modify the natural environment to suit their needs
<i>Balance of nature</i>	3. When humans interfere with nature it often produces disastrous consequences
<i>Anti-exemptionalism</i>	4. Human ingenuity will insure that we do NOT make the earth unliveable
<i>Potential eco-crisis</i>	5. Humans are severely abusing the environment
<i>Limits to growth</i>	6. The earth has plenty of natural resources if we just learn how to develop them
<i>Anti-anthropocentrism</i>	7. Plants and animals have as much right as humans to exist
<i>Balance of nature</i>	8. The balance of nature is strong enough to cope with the impacts of modern industrial nations
<i>Anti-exemptionalism</i>	9. Despite our special abilities humans are still subject to the laws of nature
<i>Potential eco-crisis</i>	10. The so-called "ecological crisis" facing humankind has been greatly exaggerated
<i>Limits to growth</i>	11. The earth is like a spaceship with very limited room and resources
<i>Anti-anthropocentrism</i>	12. Humans were meant to rule over the rest of nature
<i>Balance of nature</i>	13. The balance of nature is very delicate and easily upset
<i>Anti-exemptionalism</i>	14. Humans will eventually learn enough about how nature works to be able to control it
<i>Potential eco-crisis</i>	15. If things continue on their present course, we will soon experience a major ecological catastrophe

Respondents indicate whether they 'strongly agree', 'mildly agree', are 'unsure', 'mildly disagree' or 'strongly disagree' with each statement. Agreement with the eight odd-numbered items and disagreement with the seven even-numbered items indicate pro-NEP responses

The popularity of the NEP scale as a useful measure of environmental attitudes lies in its proven reliability and validity (Dunlap and Van Liere, 1978b; Albrecht *et al.*, 1982; Noe and Snow, 1990; Uysal *et al.*, 1994; Lück, 2000). The main drawback of this approach is that it represents a generalisation of visitors to the region and there is likely to be deeper and more complex issues at work which determine an individual's environmental orientation. In addition, the NEP scale looks at general and global environmental issues which may be considered less important than environmental issues which are closer to home and therefore more tangible.

Kimble (1978: 186) remarks that "reliability refers to the extent to which a test or other measure performs consistently" and validity refers to 'construct validity' or as Pelstring (1997: 1-2) puts it "the approximate truth of the conclusion that our operationalization accurately reflects the construct". It is not just the developers of the scale who have tested the validity of the NEP, others such as Albrecht *et al.*

(1982) and Lück (2003) note that it appears to be a valid instrument. Although there is less consensus with regards to the dimensionality of the NEP (i.e. if it measures just one environmental attitude or numerous attitudes). Where it is found to be multi-dimensional (using Factor Analysis), sub-scales are created and scores can be compared across these.

Like other environmental attitude and concern scales, the New Ecological Paradigm scale uses Likert-scale questions where responses to numerous statements are typically combined into a 'summated scale'. This type of scale draws on a body of literature called Test Theory (see Spector, 1992). The use of multiple items (statements, questions) in determining environmental attitudes is fundamental as Heberlein points out: "Because attitudes are viewed as hypothetical mental states underlying constructs which influence a variety of verbal statements, no single verbal statement yields a particularly good measure of attitude".<sup>19</sup> The aim of summing or scaling is to get a measure of the construct under the hypothesis that the errors associated with responses to any single item cancel each other out over a number of items. What an attitude scale does is reduce a person's environmental attitude to a solitary quantitative score (Spector, 1992). Although this fails to describe the richness of an environmental attitude, Heberlein notes "it is a parsimonious representation which can be easily used to compare individuals and groups".<sup>20</sup>

The use of the original twelve item NEP scale in a tourism context is by no means prolific and as yet there appears to be little use of the fifteen item New Ecological Paradigm scale. Some studies, such as Luzar et al's (1995) investigation of nature-based tourism in Louisiana, used only six items of the NEP but nevertheless were able to show that those who had engaged in nature-based activities expressed higher pro-ecological attitudes than those who did not. Uysal *et al.* (1994) appear to be some of the first researchers to apply the NEP in a tourism context. Their study of visitors to St. John in the Caribbean, part of the US Virgin Islands National Park, used the NEP to test for differences in ecological attitudes across a range of visitor characteristics. Firstly, they found the NEP, when subjected to factor analysis,

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<sup>19</sup> [www.drs.wisc.edu/heberlein/\\_documents/\\_public/EnvironmentalAttitudes.pdf#search=%22Heberlein%20%2B%20NEP%22](http://www.drs.wisc.edu/heberlein/_documents/_public/EnvironmentalAttitudes.pdf#search=%22Heberlein%20%2B%20NEP%22) (Accessed: May, 2006)

<sup>20</sup> As above (p.9).

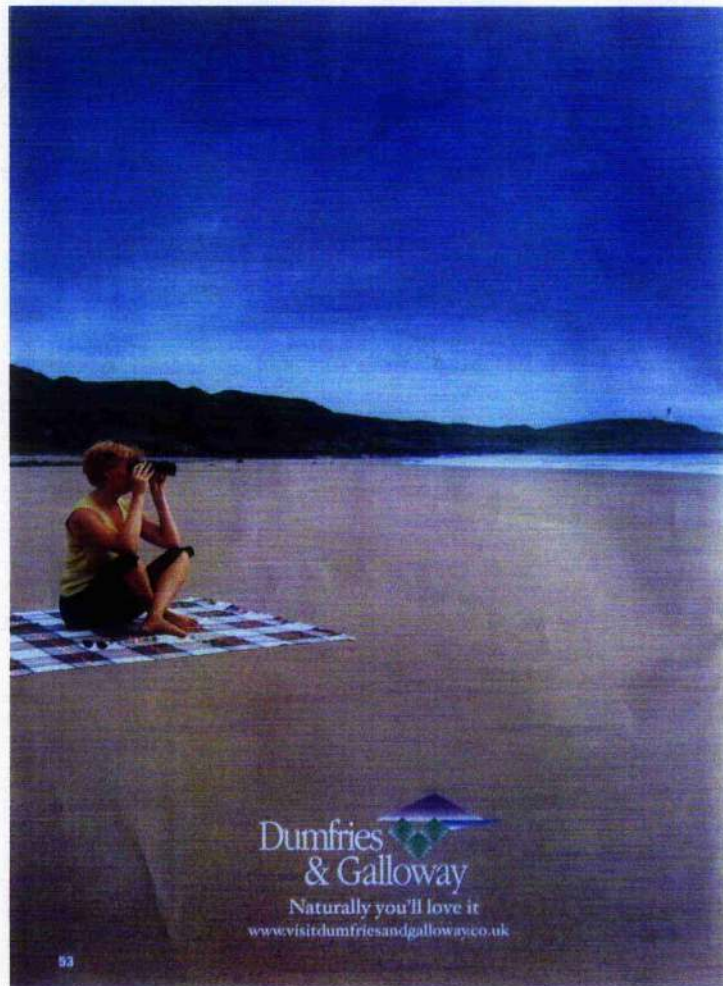
represented three distinct factors and therefore the visitor sample was analysed against each of these dimensions. Demographic characteristics of visitors were found to play a minor role in environmental attitude, although females were found to have stronger anti-anthropocentrism attitudes and older visitors (>65yrs old) held higher pro-environmental attitudes than younger visitors with regards to balance of nature. Age is thought to be a consistent predictor of environmental concern with younger people often found to be more environmentally concerned (Buttel, 1979; Van Liere and Dunlap, 1980a). Likewise, females are often found to have higher environmental concerns (Arcury, 1990; Blaikie, 1992) although any firm conclusions are blurred by mixed results elsewhere (Hines *et al.*, 1987; Mohai, 1992; Van Liere and Dunlap, 1980b; Zelezny *et al.*, 2000).

Kaae (2001) found that visitors with high pro-environmental attitudes tend to stay in certain types of accommodation such as self-catering but this aspect of tourist characteristics requires more research.

Interestingly, Uysal and colleagues (1994) report that site-specific preferences may have important contextual effects on the association and variation between travel behaviour and environmental concerns. They found that visitors who prefer less visible man-made structures, fewer people on the beach, more wildlife and vegetation appear to be more pro-environmentalist. A quick look at official tourism brochures promoting Dumfries & Galloway reveals how these elements are central to the region's image (see Plate 2.3 below).

Another interesting finding from Uysal *et al.*'s study is that visitors who travelled specifically to visit the National Park held higher pro-NEP views than those who were visiting as part of a wider holiday experience. Uysal *et al.* (1994) conclude by suggesting that in order to attract environmentally friendly visitors marketing efforts should be directed at presenting the 'natural' elements of the region; however it is argued here that an ecotourism or environmentally friendly destination will require more than just environmentally friendly tourists. It will also require services such as accommodation to be sustainable. Hence, another major focus of this thesis is farm-based tourism and how this rural service contributes towards sustainable rural tourism.





(Source: VisitScotland Dumfries & Galloway's 'see & do' guide 2004, p.53)

**Plate 2.3      The empty beach, free from other people and man-made structures**

Other tourism studies using the NEP scale include an investigation of the environmental attitudes of participants in dolphin tours in New Zealand (Lück, 2000). Lück's study compared and contrasted demographic characteristics against NEP scores. Similar to Uysal *et al.* (1994), demographics were found not to have a major influence on environmental attitudes and values. Lück (2000) did however find that endorsement of the NEP among this sample was high (mean = 3.4 on a 4-point Likert scale) which is perhaps not surprising since sampling was conducted immediately after participants had swam with dolphins. This may have raised appreciation and concern for nature.

Another tourism study from New Zealand which utilised the NEP as a means of determining environmental orientation was conducted by Higham *et al.* (2001). These researchers used the scale as part of a wider investigation profiling ecotourists. Their results confirm a high level of concern by visitors for the achievement of a state of environmental equilibrium and strong evidence of biocentric views (Higham *et al.*, 2001). Although these researchers did not provide an overall mean value, analysis of their results indicate a mean of 4.2 out of a possible 5 (highest level of endorsement of the NEP). With the exception of Higham *et al.* (2001) all other tourism studies mentioned either used a 4-point Likert-scale making comparison with the current study difficult.

Lück's (2003) paper assessing the applicability of the NEP in a tourism context notes how few tourism studies have used the NEP but describes it as a reliable and valid scale for measurement despite a mixture of results regarding dimensionality. He concludes by suggesting that the NEP needs to be tested further at different sorts of tourism attractions, and one might add to this different tourists in different locations.

## **2.5 Farm-based tourism**

The second major focus of this thesis is farm-based tourism. The following sections provide a review of literature placing this form of rural tourism within a wider context. Since definitional clarity is important for distinguishing farm-based tourism from the wider concept of rural tourism and for collecting accurate statistics on growth and development (Evans and Ilbery, 1989; Page and Getz, 1997) initially the intention is to examine what is to be considered farm-based tourism in this thesis.

### *2.5.1 Definition of farm-based tourism*

Farm-based tourism, agro-tourism or agri-tourism are terms sometimes used interchangeably with the generic term rural tourism (Deegan and Dineen, 1997). However, farm-based tourism is considered here to be a sub-sector of rural tourism (Clarke, 1996b; Oppermann, 1995; Roberts and Hall, 2001; Roberts, 2002).

'Commercial homestay' is a term sometimes used in the literature under which farm-based accommodation can be placed (Lynch, 2003), however this term also covers non-farm accommodation and is therefore less specific. Furthermore, Lynch (2003:1) suggests that "the description homestay sector is not popularly recognised yet", although "there are a range of sources which, collectively, might be perceived to constitute a suitable body of literature". This could include studies focused on various aspects of farm-based accommodation, in addition to research addressing these such as notions of home and space (Douglas, 1991), hospitableness (Lynch, 2000; Telfer, 2000) and interactions between hosts and guests (Lynch, 1999; Stringer, 1981). This thesis has a specific focus on farm-based tourism and therefore uses this terminology rather than commercial homestay.

There is no commonly accepted definition of farm tourism (Nilsson, 2002) although it has been described as "rural tourism conducted on working farms where the working environment forms part of the product from the perspective of the consumer. This contribution may be as passive as an appreciation of the working farm environment as the backcloth to the tourism experience" (Clarke, 1999: 27). 'Tourism on the farm' is a term sometimes used to describe tourism enterprises which are divorced from the agricultural business from the perspective of the consumer (Clarke, 1996b). As the above definition suggests it does not mean that visitors actually engage in farm duties although there are some niche products where this is the case (McIntosh and Campbell, 2001).

Farm-based tourism is increasingly used to describe a range of activities including accommodation, farm shops, visitor centres, educational visits, farm trails and a range of other activities (Clarke, 1996b; Sharpley and Sharpley, 1997b). Some of these may have little in common with agriculture other than being situated on the land managed by the farmer (Roberts and Hall, 2001). The wide range of potential activities and services is one of the reasons why farm-based tourism is difficult to define precisely. A second reason is there is a lack of data sources for small rural tourism enterprises (Busby and Rendle, 2000). However, there seems to be some consensus that activities and facilities are located on 'working' farms (Denman and Denman, 1993, Clarke, 1999).

By far the most common form of farm-based tourism provision is accommodation such as bed & breakfast (B&B), self-catering accommodation and caravan/campsites (Clarke, 1996b; Deroi, 1983; Nilsson, 2002; Walford, 2001). Deroi (1983) reports that approximately 25,000 farm units in the UK are involved in providing these types of accommodation, although Frater (1983) puts the figure higher with some 30,000 (12% of farms) in England alone. More recent estimates suggest 10% of all farms in England offer tourism accommodation (Denman and Denman, 1993) and 23% of all farms in the UK have some form of tourism enterprise (Busby and Rendle, 2000). The picture in Scotland is even less clear with few studies having been conducted. Given that accommodation appears to be the most frequent type of farm tourism, and the most common on-farm non-agricultural structural diversification strategy for farmers (Evans & Ilbery, 1992a; Ilbery *et al.*, 1998; Shucksmith and Smith, 1991), this thesis concentrates on farm-based accommodation. The following definition is therefore reflective of this and is not intended to encompass all forms of farm-based tourism. For the purposes of this thesis farm-based accommodation is defined as 'forms of accommodation situated within a working farm environment providing benefit to the farming family'. This definition shifts attention from demand focussed definitions that describe farm-based tourism as a product by highlighting that suppliers of these resources benefit, be that economically, socially, environmentally or in some other way. Reference to the working farm status is maintained.

### *2.5.2 Placing farm-based tourism in the wider context of rural and agricultural restructuring*

Farm-based tourism is not a new form of rural tourism. In some parts of Europe, such as Austria, farmers have been receiving visitors for over 100 years (Hummelbrunner and Miglbauer, 1994) with a similarly long tradition in Germany and France (Deroi, 1983; Oppermann, 1996). In fact Nilsson (2002) believes that farm tourism is the oldest form of rural tourism with widespread development occurring after the Second World War. Butler (1998) theorised that several, previously cited, forces have been fundamental in the development of tourism at the global scale, among these is post-war 'rural restructuring' in developed economies. In this context, rural restructuring involves "fundamental readjustments in a variety of spheres of life, where processes

of change are causally linked” (Hoggart and Paniagua, 2001:42). From this standpoint, sector-specific change such as farm diversification is not taken to be restructuring in its own right, however placed in the wider context it can be interpreted as a local expression of inter-connected processes of rural restructuring, which Woods (2005:41) suggests is “driven by globalization, technological innovation and social modernization”.

Rural restructuring has not only been expressed through changes in agriculture but throughout the wider rural economy (e.g. employment decline in all primary industries and rise in manufacturing, tourism and service sector employment). The social composition of the rural population has also changed (e.g. the undermining of the previous class structure and rising middle and service classes) as has the organisation of rural communities and services (e.g. the disappearance of services such banks, shops, post offices) and the management of the rural environment (e.g. from production to consumption, conservation, tourism and leisure use) (Cloke and Little, 1990; Lowe *et al.*, 1993; Marsden, 1998, Phillips, 1998; North, 1998; Woods, 2005).

With reference to one of the most powerful and enduring symbols of rurality, agriculture has undergone extensive post-war restructuring (Marsden *et al.*, 1987). The processes and changes that have occurred and continue to shape agriculture are contextualised and theorised by many commentators as constituting a ‘post-productivist transition’ (Lowe *et al.*, 1993; Ilbery and Bowler, 1998). Evans *et al.* (2002:314) describe the post-productivist transition theory as ‘the new orthodoxy’ suggesting “It is a term that neatly captures a sense of fundamental change in postwar agriculture covering the political culture within which agriculture operates, the policy and market conditions under which farming takes place and the experiences of farmers themselves”. These authors are however critical of some of the characteristics and ‘dualistic’ nature of productivist and post-productivist distinctions. Nevertheless it remains a useful theory for conceptualising the growth of on-farm non-agricultural diversification strategies such as farm-based tourism which Evans *et al.* (2002) concede is arguably “the strongest candidate for a process of change towards post-productivism”. It is perhaps less useful as a descriptor of

change where diversification involves novel crops or livestock since these are productivist activities.

With particular reference to agriculture, the period following the Second World War was characterised by a political emphasis on self-sufficiency in food supply (a political desire also evident in wood-security through the creation of large plantations such as the Galloway Forest Park). One upshot of this was the launch of production-oriented subsidies aimed at maximising food production through intensive production and augmenting yields through biotechnology (Sharpley and Vass, 2006). With intensification and concentration of agricultural production came specialisation which collectively resulted in: greater differences between rural areas; the development of larger farm units; fewer employment opportunities; changes in the relationship between primary producers and large retailers as well as negative impacts on the rural environment such as pollution and loss of biodiversity (Ilbery, 1998). In terms of its central goal of increasing agricultural production, productivism was an unquestionable success (Woods, 2005) however it set in motion many of the challenges confronting contemporary rural areas today (Sharpley and Vass, 2006).

Most agricultural production in developed economies continued in a productivist mode up until the mid-1980s (Ilbery and Bowler, 1998) when the problems of oversupply and 'food mountains', national budgetary constraints and mounting concern over health issues allied with intensive farming methods were called into question (Lowe *et al.*, 1993; Woods, 2005). The increasing influence of the environmental movement is thought to have played an important role in highlighting the inefficient, wasteful and damaging agricultural policies of the time (Ilbery and Bowler, 1998). This period is generally considered to represent the onset of the post-productivist era. This post-productivist transition from expansion and modernisation to extensification, environmental stewardship and diversification in Europe and the United States was directly influenced by government intervention. State intervention was responsive to wider changes in international policy including CAP reform in Europe, GATT agreements on world agricultural trade and Agenda 21 following the Earth Summit in 1992 (Ilbery and Bowler, 1998). The focus shifted from quantity of production to quality agricultural production (a transition which can also be observed in tourism demand for holiday experiences) within a context of sustainable rural

development. This however does not mean that productivist modes of production have been replaced by post-productivist systems, “the two diverging pathways coexist” and “intensive high input – high output farming, with an emphasis on food quantity, is still being encouraged” but is now “complemented by the development of low-input low-out farming, with an emphasis on sustainable farming systems and food quality” (Ilbery and Bowler, 1998: 57).

Ilbery and Bowler (1998:71) list six potential pathways of farm business development as farmers adjust to the post-productivist transition:

1. Extension of the industrial model of farm business development based on traditional products and services on the farm.
2. Redeployment of farm resources (including human capital) into new agricultural products or services on the farm (agricultural diversification).
3. Redeployment of farm resources (including human capital) into new non-agricultural products or services on the farm (structural diversification).
4. Redeployment of human capital into an off-farm occupation (‘other gainful activities’).
5. Maintenance of traditional farm production and services with reduced capital inputs (extensification)
6. Hobby or part-time (semi-retired) farming.

Pluriactivity, the generation of income by household members from on-farm and/or off-farm sources or activities in addition to income from primary agriculture, involves the third and fourth potential pathways. Farm-based tourism development falls under the third pathway as an on-farm non-agricultural structural diversification option.

With the reduction of state subsidies related to output and the decoupling of production from subsidy (most noticeably through the CAP’s recent Single Farm Payment), policies have been directing farmers towards more environmentally and socially appropriate ways of managing the countryside (e.g. Organic Aid Scheme, Woodland Grant Scheme, Environmentally Sensitive Areas, etc.) (Potter, 1998; Sharpley and Vass, 2006; Woods, 2005). Policies have encouraged farmers to

diversify and reduce their dependence upon traditional agriculture and become shopkeepers, leisure providers, foresters, nature conservers and public custodians of the countryside (Birnie *et al.*, 2004; Burton, 2004; Sharpley and Vass, 2006). A Scottish study by Allbrooke *et al.* (1998) in Dumfries and Galloway found 16% of farmers planned to increase income through diversification. Another study by Ramsay *et al.* (1999) in the Scottish Borders found 46% envisaged a need to develop non-agricultural sources of income with holiday accommodation and off-farm employment the most likely developments (Winter and Smith, 2000). State support for agricultural diversification reflects a realisation that many, but not all (Hodge and Monk, 2004), rural areas are facing significant social and economic challenges including depopulation, rural to urban migration, ageing populations and the decline of traditional agrarian industries. Tourism in general and farm-based tourism in particular has increasingly been considered an effective catalyst for rural development and regeneration in response to socio-economic decline and the restructuring of agriculture (Sharpley and Vass, 2006).

National policies for the support and development of farm tourism have been in existence for some time. For example, in France the establishment of *gîtes ruraux* in 1955 encouraged farmers to convert redundant farm buildings into accommodation facilities by providing financial aid (Dernoi, 1983). Farming communities in other countries such as Italy, Germany and Denmark have similarly benefited from state support for the development of accommodation facilities on farms (Frater, 1983; Nilsson, 2002). According to Sharpley and Vass (2006) the UK does not enjoy the long tradition of farm-based tourism as recorded in many of the countries mentioned above, probably partly related to the lack of government support for the development of farm-based tourism, until 1988 when the Farm Diversification Grant Scheme (FDGS) was introduced. Since then a variety of services ranging from advice to financial aid has emerged for the development of 'alternative farm enterprises' including tourism (Bowler *et al.*, 1996; Ilbery *et al.*, 1998). The partial relaxation of planning controls in the 1990s is thought to have further encouraged diversification especially in relation to converting redundant buildings for tourist accommodation (Walford, 2001). From 2001, government support for farm diversification in Scotland (funded by the Scottish Executive and Rural Affairs Department (SEERAD)) has taken the form of the Agricultural Business Development Scheme



(ABDS) and the Farm Business Development Scheme (FBDS) which at the time of writing is in its final year. In Scotland it is estimated that around 40% of farm businesses have diversified although not all of these have made use of grant support. Growing consumption of the countryside for leisure and tourism purposes has provided new opportunities for economic growth and farmers, through the provision of visitor facilities, are in a prime position to capitalise on the 'tourist crop'. Tourism not only offers the opportunity to generate significant economic income for governments, but may also address some of the problems facing rural areas in particular declining incomes for farming families. It is therefore not surprising that tourism is sometimes hailed as a panacea for rural problems. It can however bring its own problems including too much dependence on the industry, issues of seasonality, low wages and negative social and environmental impacts (Roberts and Hall, 2001). The recent UK Foot-and-Mouth Disease (FMD) epidemic in 2001 serves as a stark reminder that tourism is influenced by external forces beyond its control and therefore should not form the sole basis of a regional development strategy but should complement an existing diverse rural economy (Butler and Clark, 1992). Analysis of the economic impact of FMD outbreak has suggested that tourism revenue losses exceeded those of agriculture (Blake *et al.*, 2003) thus highlighting how important tourism has become in rural areas of the UK. Given that a negative impact on one of these industries is likely to impact on the other, it calls into question the sustainability of the tourism/agriculture juxtaposition.

### 2.5.3 *Farm-based tourism research*

The literature surrounding farm-based tourism is extensive, yet there remain very few case studies from Scotland. The number of farm tourism enterprises in Scotland is thought to be low compared to England and Wales (McInerney *et al.*, 1989; Slee, 1998) which might partly explain the lack of research attention. Slee (1998: 94) explains that the low level of farm and estate tourism in Scotland has resulted in enterprise owners and managers of these facilities often being considered "bystanders" rather than "stakeholders" in the tourism industry, although their contribution to the portfolio of rural tourism products may be significant. Gladstone and Morris (1998, 2000) provide one of the few studies of farm-based tourism in

Scotland, concentrating their efforts on accommodation provision in three areas: Orkney, Perthshire and South Ayrshire. Their research starts by acknowledging that farm-based tourism in Scotland has "been largely overlooked from the point of view of providing much needed regeneration in rural Scotland" (Gladstone and Morris, 1998: 209). These researchers note that demand for farm-based tourism has been fuelled by several factors: growth in the short break market; growth in the demand for activity-based holidays; growth in numbers of consumers reacting against mass tourism; and, the urbanisation of the population leading to a desire to experience a different lifestyle. Morris (2002) predicts future demand for farm-based tourism based on increasing interest in the countryside, the environment, walking and cycling, and health and fitness.

Gladstone and Morris (1998) found self-catering accommodation to be the most frequent form of farm-based accommodation followed by B&B and in some places like Ayrshire and Arran, these resources account for a significant proportion of available accommodation stock, thus elevating their contribution to 'stakeholder' status. Other research from North West England reached a similar conclusion (Questions Answered Ltd., 2004). The contribution of farm-based accommodation to available stock in Dumfries & Galloway is unknown. Gladstone and Morris (1998) may have underestimated the role of farm-based tourism in Scotland because they used official tourism brochures to determine the presence of farm-based accommodation enterprises. It is likely that in some regions, including Perthshire and Ayrshire and Arran, not all will advertise through this source because not all enterprises will be members of the local tourist board or Quality Assured under VisitScotland.

Using a combination of qualitative and quantitative methods, Gladstone and Morris (1998) generated information from a total of 88 farm-based enterprises in these regions. Some of the key findings include the gendered nature of farm-based accommodation provision with 91% of operators being female. Research in other countries such as England, Ireland and New Zealand has also revealed that the operation of farm-based tourism enterprises tends to be highly gendered (Busby and Rendle, 2000; Gasson, 1980; McIntosh and Campbell, 2001).

The dualistic role that farm-based tourism operators often have in relation to the farm and tourism business has been noted by several researchers (Dernoi, 1991a, 1991b; Gasson, 1980; Gladstone and Morris, 1998; McIntosh and Campbell, 2001). In a sample of farm-accommodation providers in Scotland, 11% worked on the farm full-time, 28% part-time, 27% occasionally and 33% never (Gladstone and Morris, 1998).

The influence of agricultural policy in the development of farm-based accommodation in some areas of Scotland is evident from Gladstone and Morris's research. 80% of farm accommodation businesses in Orkney, Perthshire and Ayrshire and Arran were established following the introduction of the Farm Diversification Grant Scheme (FDGS) in 1988. Yet research from England and Wales has shown that uptake of this grant was low and farmers would have diversified regardless of state support (Edwards *et al.*, 1994; Ilbery and Bowler, 1993). Similar to findings elsewhere (Beioley, 1999, 2000; Evans and Ilbery, 1992a; Nilsson, 2002), Gladstone and Morris (1998) report that the main reasons for starting the tourism enterprise was to provide an additional source of income and to make use of existing spare accommodation. However, Gladstone and Morris divulge little else; there are no examples describing the personal or wider conditions which have led to the need to diversify. Research in Wales found reasons beyond financial considerations for diversifying (Orban and Teckenberg, 1996). Due to the relative isolation of some farms, social interaction with guests is often considered a highly valued aspect of operating a farm tourism business (Gladstone and Morris, 1998; Hjalager, 1996).

Tourism has been highlighted as a means of increasing the economic sustainability of rural areas. Research reveals that employment and income generation are not however as high as one might expect. Some researchers have noted that the development of farm-based tourism provides little in the way of external employment opportunities, with most jobs being retained within the family (Gladstone and Morris, 1998; Hjalager, 1996). This is perhaps because most enterprises are small-scale with B&B accommodation typically supporting 6 or fewer bed spaces (Dernoi, 1991a; Weaver and Fennell, 1997). Farm-based self-catering operators in North West England usually have two units for rent (Questions Answered Ltd., 2004). The need for external help may therefore be low, although

this should not detract from the fact that self-employment opportunities have been created (Mitchell and Hall, 2005).

The literature on farm-based tourism reveals that the contribution of tourism revenue to total farm household income also tends to be quite low (Nilsson, 2002), however this income may, in some cases, mean farm survival (Ilbery *et al.*, 1998). For example, in South Ayrshire 67% of respondents noted that the tourism business generated less than £2,000 per annum, most of which was re-invested in the accommodation (Gladstone and Morris, 1998). Fennell and Weaver (1997) report that farm-based tourism typically accounts for less than 1% of total farm household income in Saskatchewan, Canada. In Germany the figure is around 10% of total household income (Oppermann, 1997) similar to Sweden and Portugal (Cavaco, 1995; Hummelbrunner and Miglbauer, 1994; Gössling and Mattsson, 2002). There are some qualitative studies that show that tourism revenue can account for half or more of total farm household income (Nilsson, 2002; Orban and Teckenberg, 1996) therefore suggesting that broad generalisations should be supplemented with qualitative evidence from individuals involved in farm accommodation provision.

Differences in levels of income derived from tourism may reflect the observation that farm-based tourism enterprises are more likely to succeed in rural areas that are accessible to large urban populations or where the environment facilitates outdoor activities and is aesthetically pleasing (Walford, 2001). Furthermore, Walford's research in England and Wales reveals a possible 'neighbourhood effect' in relation to designated scenic areas with most farm-based tourism enterprises located close to these, a theory which requires further analysis. The geographic distribution of farm accommodation enterprises is important in assessing sustainability. It has been suggested that dispersed enterprises can alleviate problems of physical impacts and crowding while allowing for greater dispersal of economic and social benefits (Lane, 1991; Moscardo *et al.*, 1996). Therefore, the existence of a 'neighbourhood effect' may be detrimental to a region's sustainability.

In addition to external factors such as location, the literature indicates a number of internal factors that are important in farm-based tourism development. For example the stage in the family life cycle is thought to be important (Ilbery and Bowler,

1998). These analysts also note that farmers willing to diversify tend to run large farm businesses with a higher net income and greater degree of indebtedness. They tend to be younger and have continued their education receiving formal qualifications in agriculture. Moreover, they tend to have children wishing to continue in the farm business (Ilbery and Bowler, 1998).

Carlsen *et al.* (2001) emphasise that very little research has been conducted on small rural tourism businesses engaging in sustainable practices. As competition between regions and enterprises increases the environmental performance of tourism providers is becoming more important, not only in terms of gaining competitive advantage, but also for consumer choice (Hudson and Miller, 2002). In the absence of regulation the adoption of environmental performance standards, according to Carter *et al.* (2004: 52), is predominantly the result of one or more of the following:

- economic benefit
- competitive advantage
- market advantage
- individual environmental ethic, and
- corporate culture (a quality or environmental ethic)

As discussed previously, the Green Tourism Business Scheme (GTBS) is the main vehicle for improving the environmental performance of accommodation providers in Scotland. In terms of sustainable rural tourism development it is not sufficient that most farm-based tourism enterprises are small-scale: they should also demonstrate a commitment to reducing their environmental impact. If farm-based accommodation providers support conservation and engage in environmental management practices then “this sector can be a powerful force for achieving sustainable tourism goals. If not, a lot more education, advice, and incentives will be required” (Carlsen *et al.*, 2001). It is the attitudes and behaviour of both consumers and providers of the tourist product that will determine the success of sustainable rural tourism development.

Linked with environmental performance is the issue of quality. This has become a critical issue for developers and consumers of rural tourism accommodation (Roberts

and Hall, 2001). As part of the changing and increasingly competitive tourism market, farm-based accommodation providers need to respond to wider customer demands for quality products (Hill and Busby, 2002; Morris, 2002; Youell and Wornell, 2005). Research from England has shown that although staying on a farm is viewed as being an attractive prospect, people are concerned about basic standards and facilities and there is a fear of variable standards from farm to farm (Denman, 1994a). These are thought to be the main reasons why some people refrain from using farm-based accommodation. Clarke (1996b) believes that the development of farm-based accommodation will need to focus on the quality issue (consistency, value for money, and consumer satisfaction) in the coming years. Studies have shown that the adoption of quality assurance schemes among farm-based accommodation providers vary considerably within the UK (Deakin, 1997; Morris, 2002).

Marketing, networking and cooperation are considered to be extremely important for sustainable rural tourism development (Mitchell and Hall, 2005). This is especially fundamental for farm-based accommodation providers who are often isolated and located outwith the main rural settlements (Clarke, 1996a). In terms of networking and cooperation Clarke (1996b) suggests that agricultural and tourism bodies need to work together in developing joint initiatives, and individual farms should join national marketing organisations such as Farm Stay UK. This organisation represents the single largest network of farm-based accommodation in the UK (Sharpley and Vass, 2006), yet a quick review of current participation reveals that very few farm-based accommodation providers in Scotland are members. Examples from Cumbria and South West England serve as good examples that addressing issues of farm brand identity, marketing, cooperation and networking can be extremely important in securing the long-term success of farm-based enterprises. The reasons why enterprises in Scotland have not embraced this approach requires investigation.

As with any tourism product, success of rural enterprises will also be determined by the quality and availability of promotional materials. Guidebooks and brochures have been identified as important sources of promotion and advertisement for farm-based tourism enterprises in some countries (Clarke, 1996b; Evans and Ilbery, 1992b; Wicks and Schuett, 1991), however there remains little information pertaining to

Scottish farm-based enterprises where participation in national consortiums such as Farm Stay UK is low. More recently, the internet and electronic communication methods are increasingly being used by consumers to gaze at potential products, book accommodation and communicate with service providers. From the perspective of the tourism provider, internet communications can reduce remoteness, reliance on intermediaries (booking agencies), reduce advertising costs and can be considered a more environmentally appropriate means of advertising (Clarke, 2005). The importance of internet technology for tourism is highlighted by the Scottish Executive in their new national tourism strategy: "Tourists increasingly want to find out about trips and activities online, and to book them online in real time. If we can't provide this service, visitors are likely to go elsewhere, regardless of the quality product we have to offer them. We therefore need to ensure that tourism businesses, local authorities and culture and heritage organisations are able to provide this service" (Scottish Executive, 2006a: 30). Subsequently, one key target is: "By 2007 every tourism business – including those operated by the public and voluntary sectors – will be on at least the first rung of the e-technology ladder and will continue beyond 2007 to work their way up that ladder" (Scottish Executive, 2006a: 31). The first rung is having a computer and email address for the business.

Although the farm-based tourism literature is large and growing it is surprising to find that few studies report on some of the difficult aspects of having both a tourism and agricultural business. Likewise, few studies report on the personal aspects relating to the operation of a farm accommodation business. Farming is considered to be a way of life rather than a job and therefore any diversification strategy will have a significant impact on the personal experiences of the farming family. Government policy, through state supported schemes, is encouraging farmers to diversify yet the realities of the tourism-agricultural marriage are seldom stated. One exception is Gladstone and Morris's (1998) paper, where farm-based accommodation providers in some regions of Scotland voiced a few disadvantages including being tied to the house at weekends (self-catering accommodation providers) and being tied to the house and phone for the summer (those providing B&B and dinners). Difficulties do exist in combining farming and tourism especially juggling priorities for the farm business, the family, and the paying guests. Although not a social disadvantage as such, the costs of advertising and quality grading in relation to referrals from the

tourist board were also of some concern (Gladstone and Morris, 1998). Elements of social sustainability that may develop from operating a farm tourism enterprise including contact with other cultures, education, empowerment and financial autonomy have yet to be fully explored.

The role of farm-based accommodation in promoting rural sustainability is highlighted by Moscardo *et al.* (1996:32) who suggest that this type of accommodation might fit under what they term ecologically-sustainable accommodation, the characteristics of which are summarised as follows:

- Small-scale.
- Locally owned (to maximise local economic benefits).
- Provides employment opportunities for the local community.
- Provides other economic opportunities for the local community.
- Is spread throughout a region rather than clustered near major attractions (This both spreads the benefits and impacts of tourism).
- Has a character, either through design or activities offered, that reflects the region.
- Encourages protection of the heritage of a region through the use of existing and/or heritage buildings through providing interpretive or educational opportunities for guests through encouraging guests to engage in sustainable activities by minimising adverse biophysical impacts.
- Does not adversely impact on other industries or activities.
- Provides a quality experience for guests.
- Must be a successful business.

Surprisingly, Moscardo *et al.* (1996) make no reference to the ongoing environmental management of the accommodation which clearly has the ability to have a huge impact on sustainability. Nevertheless, this list is useful for assessing whether farm-based accommodation can be considered to be ecologically-sustainable and therefore strengthen or weaken an area's claim as an ecotourism or environmentally friendly destination. This thesis will consider these criteria in Chapter Seven. These authors introduce another set of criteria that can be used to



determine whether farm-based accommodation can be considered 'specialist accommodation'. The criteria are as follows:

- a) Personal service, defined as the provision of guest interaction with a small core of host personnel in a range of settings (greeting, meals, information, conversation, administration).
- b) Some special opportunity or advantage to guests through:
  - i. location (for example, a farm or wilderness setting);
  - ii. features of the establishment (for example, a heritage or historic building);
  - iii. activities offered to guests (for example, craft courses or wildlife viewing).
- c) Accommodation which is usually owner-operated and not part of any chain or consortium.

(Source: Moscardo *et al.*, 1996:32)

These authors note that it is not necessary for every establishment to meet all of the criteria, rather it is the overall profile that can be used to determine specialist status. Establishing the 'specialist accommodation' status would appear to be important if farm-based accommodation is to be clearly established as a niche product.

## **2.6 Specific aims of the thesis**

In synergy with the broad aims of this thesis, the preceding review of literature has revealed knowledge gaps and identified a number of specific aims which this thesis will address. The purpose of this final section is to make the specific aims explicit and present them in relation to the topics of enquiry.

Firstly, with reference to the ecological attitudes of visitors to Dumfries & Galloway the specific aims of the thesis are to:

- Determine the ecological attitudes of visitors using the New Ecological Paradigm scale.

- Determine if there are any differences in the ecological attitudes of visitors with different demographic characteristics.
- Reveal any differences in the ecological attitudes of visitors in relation to accommodation choice.
- Establish if visitors differ in their ecological attitudes depending on the activities they pursue.
- Review the concept of ecotourism in a Dumfries & Galloway context, revealing stakeholder views and visitor associations with the concept.
- Investigate the environmental practices of visitors and membership of conservation/environmental groups, and reveal any differences in ecological attitudes.
- Compare and contrast the characteristics of nature-focused visitors, general rural visitors, ecotourists and non-ecotourists.
- Consider the research findings for the sustainable development of tourism in Dumfries & Galloway.

Secondly, in relation to farm-based tourism the specific aims of the thesis are to:

- Contribute to the lack of literature addressing farm-based tourism in Scotland.
- Determine the extent of farm-based accommodation in Dumfries & Galloway.
- Consider the status of farm-based accommodation providers as 'stakeholders' or 'bystanders'.
- Assess the social, environmental and economic sustainability of farm-based accommodation provision.
- Determine the perceived importance of the working farm status in attracting visitors and comparing supply views with demand views.
- Investigate the reasons why farmers diversify into tourism with reference to the business practices of the farm enterprise and the personal ambitions of the farmer.
- Review networking and promotion with regards to sustainability.
- Consider the research findings and review farm-based tourism as a sustainable form of rural tourism in Dumfries & Galloway.

## CHAPTER THREE

### 3 DUMFRIES & GALLOWAY AS A TOURISM DESTINATION

#### 3.1 Appropriateness of Dumfries & Galloway as a study site

This thesis is based upon qualitative and quantitative research undertaken in Dumfries & Galloway, south-west Scotland (see Figure 3.1). Dumfries & Galloway serves as an ideal study region for this thesis for several reasons. Firstly, tourism is an important sector of the regional economy generating around £161 million per year and creating employment for over 11% of the working population excluding self-employees (VisitScotland, 2004a). Over one million tourist trips are taken to the region each year (5% of all trips to Scotland) and more than twenty-one million day visits are taken to and within the region (TNS, 2005; VisitScotland, 2004a). Although tourism is important for the region's economy, it remains one of the least visited regions of Scotland along with Angus, Perthshire, Fife and the neighbouring Scottish Borders (Table 3.1).

**Table 3.1 Dumfries & Galloway in the context of other Scottish regions**

	Tourism employment <sup>1</sup> (% of all employment)	Number of tourism trips (m) <sup>2</sup>	Tourism expenditure (£m) <sup>2</sup>	Number of all day visits (m) <sup>2</sup>	All day visit expenditure (£m) <sup>2</sup>	% of domestic visitors arriving by car
Aberdeen & Grampian	8.9%	1.61	378	60.6	764	67%
Angus & the City of Dundee	6.8%	0.64	113	6.6	92	72%
Argyll, the Isles, Loch Lomond, Stirling, and the Trossachs	10%	2.22	461	11.6	209	72%
Ayrshire & Arran	10%	1.18	203	33.6	334	72%
Dumfries & Galloway	11.4%	1.03	167	21	174	84%
Edinburgh & the Lothians	9%	4.49	1,072.8	39.4	678	51%
Greater Glasgow & Clyde Valley	7.6%	3.25	806	109.3	1,382	51%
Highlands of Scotland	13.5%	2.54	606	29.9	371	71%
Kingdom of Fife	8.8%	0.79	173	28.7	272	78%
Perthshire	10.8%	0.99	207	32.4	256	81%
Scottish Borders	7.3%	0.54*	91*	10.1*	152*	68%*
Western Isles, Shetland & Orkney	-	-	-	-	-	-
Scotland <sup>1</sup>	8.8%	17.26	4,214	457.3	6,087	65%

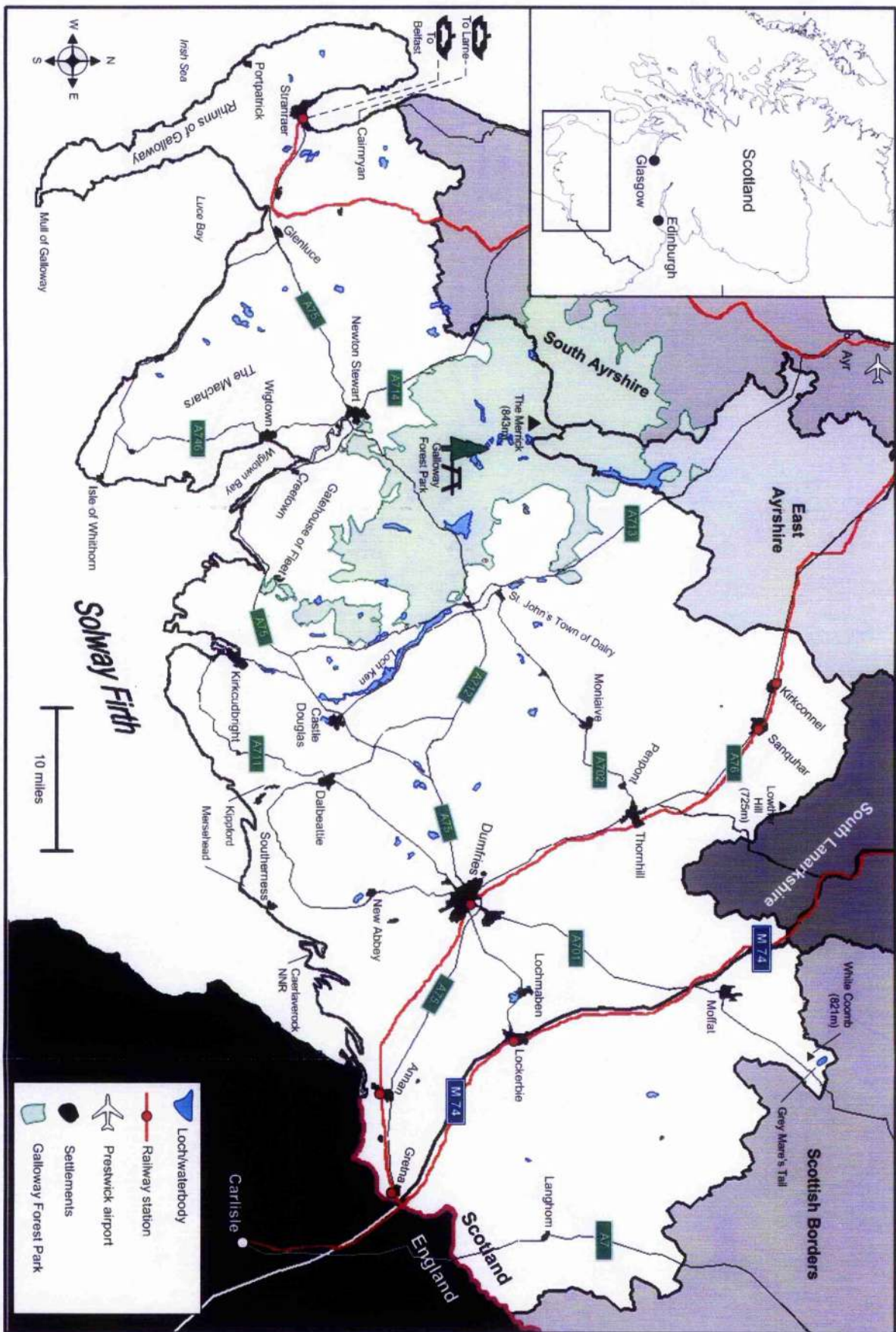
<sup>1</sup>Figures for 2005 (source: [www.scotexchange.net/research\\_and\\_statistics.htm](http://www.scotexchange.net/research_and_statistics.htm))

<sup>2</sup>Most recent available figures (2003) (source: as above)

\*Figures for 2002 only.

- No data available.

Figure 3.1 The study region of Dumfries & Galloway, south-west Scotland



The appropriateness of Dumfries & Galloway for studying farm-based accommodation as a rural tourism service and structural diversification strategy not only stems from the fact that overnight visitors need somewhere to stay, but like other rural regions, agricultural communities are facing a number of problems (Sharpley and Vass, 2006). From 1983 to 2003 there has been a 40% decrease in the number of regular agricultural workers in Dumfries & Galloway, a 25% decrease in the number of seasonal and casual workers, and a 50% increase in the number of spouses working (Scottish Enterprise Dumfries & Galloway, 2004). Despite the overall decrease in agricultural employment, the region still currently provides employment for around 10% of Scotland's agricultural workforce, although half of these are part-time or less (Scottish Executive, 2006c). Furthermore, at the national level agricultural incomes have been falling dramatically since 1995 (Slee *et al.*, 2001) and, despite having difficulty in finding regional statistics, there is no reason to suspect that farms in Dumfries & Galloway do not follow this trend. Subsequently, on-farm non-agricultural diversification such as tourism accommodation may be one particular route that farmers in Dumfries & Galloway have chosen. However, there remains little research on this tourism product and structural diversification strategy in the region or Scotland as a whole which makes Dumfries & Galloway an ideal location for achieving the aims of this thesis.

### **3.2 Brief description of Dumfries & Galloway**

As previously discussed, the term rural is problematic however it would be difficult to describe Scotland's third largest local authority area in any other terms. 70% of Dumfries & Galloway is under agriculture with a further 25% in forestry. From a tourist perspective it is interesting to note that in 1947 only 4% of the region was wooded (Davies, 1982) whereas now the region hosts Britain's largest forest park covering 300 square miles (Galloway Forest Park). These large areas of forestry now have an important role in providing tourism and recreational opportunities. The population density of the study region is 0.23 people per hectare which is almost three times lower than the Scottish average of 0.65. Employment is based around a number of key industries including agriculture and forestry (9%), manufacturing (13%), construction (8%), tourism (11.4%) and most significantly the public sector

(Scottish Enterprise Dumfries & Galloway, 2004; VisitScotland, 2004a). Around 30% of jobs in Dumfries & Galloway were in public services in 2003, higher than the national average (Scottish Enterprise, 2005). 92% of firms in the region are micro-businesses employing fewer than 10 people.<sup>21</sup>

The administrative centre of the region, and the largest town, is Dumfries with a population of around 32,000 (22% of the region's population). There are a number of other settlements of significant size including the port of Stranraer in the west, which hosts a ferry link with Northern Ireland, and Annan in the east of the region. All other settlements have populations fewer than 4000. The region as a whole is suffering from population decline, with an out-migration of young people and in-migration of retirees. Future population decline is forecast to be in the region of -7.8% by 2018, and is predicted to lead to a significant skills shortage in Dumfries & Galloway (Scottish Enterprise Dumfries & Galloway, 2004).

Reflecting the upland topography of the region, agriculture is mainly based around cattle and sheep, with the majority of the land considered to be severely disadvantaged under the Less Favoured Areas (LFA) classification. Dumfries & Galloway is also home to a third of Scotland's dairy cattle, and the 'iconic' (at least in farming circles) Belted Galloway (Plate 3.1). Near the Solway coast a small area of land is dedicated to cereal production.



**Plate 3.1**

**The 'iconic' Belted Galloway**

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<sup>21</sup> [www.crichtonfoundation.org/region.asp](http://www.crichtonfoundation.org/region.asp)

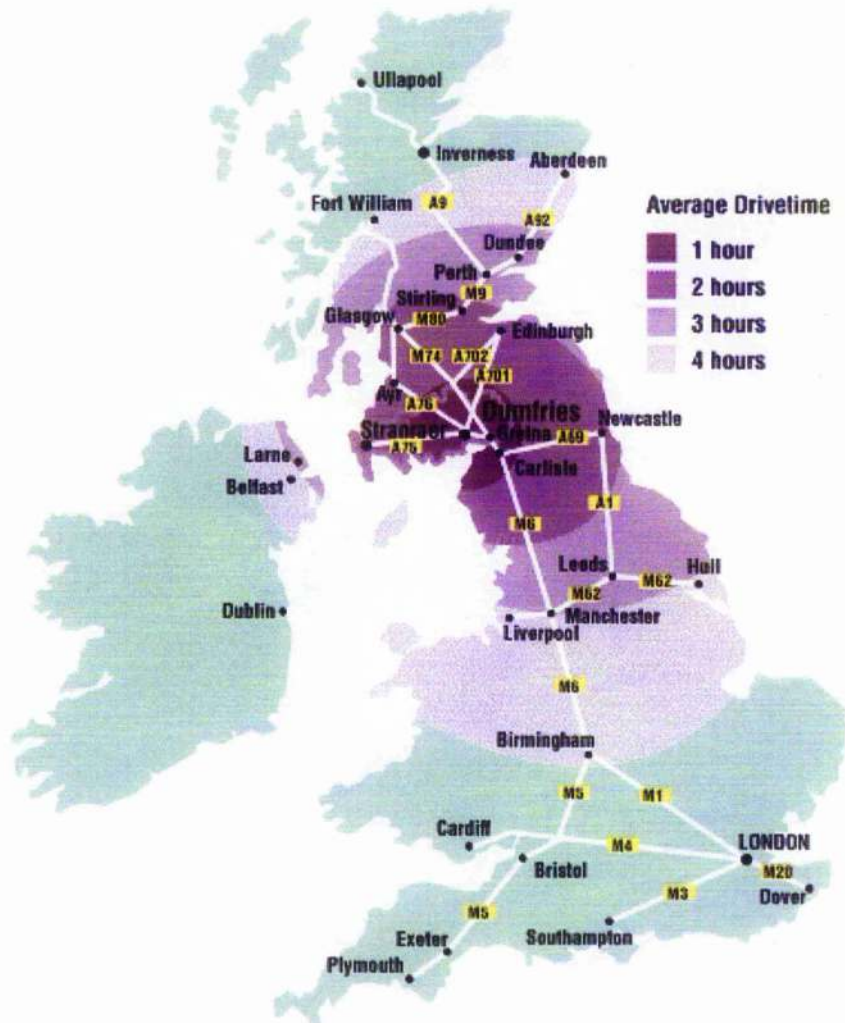
As shown in Figure 3.1, the study region shares boundaries with four other Scottish Local Authorities and a national boundary with England and aquatic boundary with Northern Ireland. The large estuary between Scotland and England is reputed to be one of the least modified estuaries in Europe retaining much of its natural shoreline.<sup>22</sup> The ecological value of the Solway Firth is reflected in numerous European and international designations bestowed upon some areas, such as Ramsar Site and Special Area of Conservation (SAC). Inland from the Solway Firth, the Southern Upland Fault gives rise to a range of hills stretching from west to east. In general, the hills in the western half of the region are more craggy and wild in appearance whereas the hills in the east are smooth and undulating. The highest mountain in the region, located in the west, is The Merrick standing at 843m.

Dumfries & Galloway is dissected in the east by the M74, the main motorway between Scotland and England providing good access to key domestic tourism markets and within reasonable driving distance of large urban populations (Figure 3.2). Further west there are a number of key roads running across the region which are serviced with public transport. The region does not have any airports. The Glasgow to London west coast railway line follows the M74 providing some access to the east of the region. There is also a rail link between Dumfries and Glasgow which follows the Nith Valley. The far west of the region also has a rail link between Stranraer and Glasgow, however most of Dumfries & Galloway is not serviced by rail transportation as shown in Figure 3.1. As shown in Table 3.1, Dumfries & Galloway relies heavily on visitors with access to private cars, more so than any other region in Scotland.

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<sup>22</sup> [www.jncc.gov.uk/ProtectedSites/SACselection/habitat.asp?FeatureIntCode=III130](http://www.jncc.gov.uk/ProtectedSites/SACselection/habitat.asp?FeatureIntCode=III130)

**Figure 3.2 Average drivetime to Dumfries & Galloway**



(Source: <http://www.visitdumfriesandgalloway.co.uk/travel/#>)

### 3.3 Some key aspects of tourism in Dumfries & Galloway

Mill and Morrison (2002) note that the central aspects of a tourism destination are attractions. Although attractions are fundamental for bringing people into a region, a tourism destination must also have adequate facilities, infrastructure, and transportation alternatives to make the visitors' stay enjoyable. The term 'competitive destination' is often used in the tourism literature to benchmark one region from another. There are two main concepts; firstly, comparative advantage refers to the advantages a destination has over another. There are several models that indicate what should be compared, however Ritchie and Crouch's (2003) model



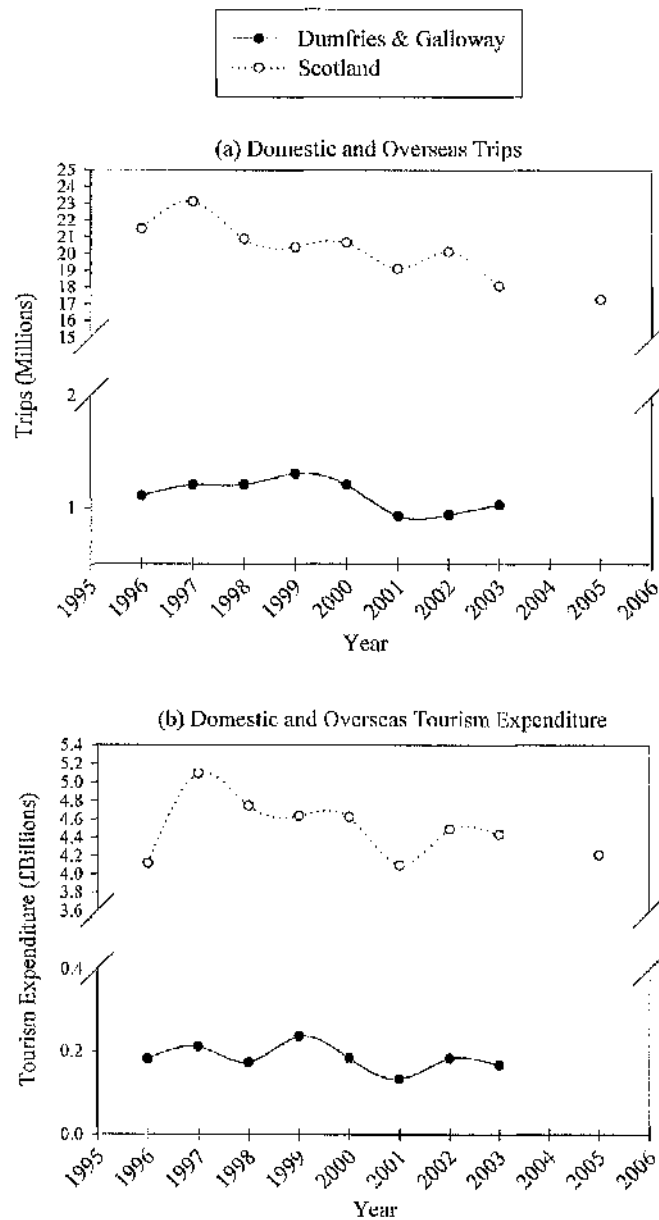
suggests that human resources, physical resources, knowledge resources, infrastructure and tourism superstructure, historical and cultural resources, and size of economy are key elements. The second main concept is competitive advantage and this refers to how a destination utilises its resources to gain competitive advantage in the marketplace (Mill and Morrison, 2002). As discussed below, Dumfries & Galloway draws heavily on its natural and cultural resources, but these have not been exploited to the same extent as other regions in the UK. For example, attractions related to Robert Burns appear to be underdeveloped in Dumfries & Galloway. In contrast, Stratford-upon-Avon has a well (some might say over-) developed reliance on cultural figures like William Shakespeare in attracting visitors. Based on the exploitation of both these historical figures, one could conclude that Stratford-upon-Avon is a more competitive tourism destination than Dumfries & Galloway. In short, a competitive tourism destination is one that makes the best sustainable use of its resources (Crouch, 2006). It is not the focus of this thesis to enter a discussion with regards to Dumfries & Galloway as a competitive tourism destination, although it is important to acknowledge that there is a stream of literature addressing this issue.

Tourism is clearly fundamental to the Dumfries & Galloway economy, and the main attractions of the region centre on the 'natural' environment, the built heritage such as castles, and cultural heritage including Robert Burns who lived and worked in the area, as well as Gretna Green (famous for weddings). The ways in which the region has been constructed to appeal to visitors, through tourist brochures, has been discussed by Macleod (2003) who notes the use of evocative prose to stir the imagination of visitors. The top four visitor attractions in the region are: the World Famous Old Blacksmith Shop Centre, Gretna Green (c.716,000 visits); Mabie Farm Park, Dumfries (c.71,000); Threave Garden, near Castle Douglas (c.66,000); and, Cream o' Galloway near Castle Douglas (c.66,000) (VisitScotland, 2004a). The second and last of these attractions are farm-based attractions. Visiting castles, monuments, museums, walking and field/nature study have been identified as the most popular activities (VisitScotland, 2004a). The region could be accused of lacking the grandeur, scale and rugged scenery of the western Highlands of Scotland which is perhaps reflected in the fact that more than twice as many trips are made to the Highlands; however, Dumfries & Galloway is more accessible to English visitors

who represent the main market. Furthermore, the lower number of visitors to the region is likely to be viewed as a positive by visitors seeking a more personal and authentic experience.

In Scotland as a whole, the tourism industry has been in gradual decline since 1997 with both the number of long and short holidays and revenue generated showing a downward trend. Prior to the Foot-and-Mouth (FMD) epidemic in 2001, Dumfries & Galloway was recording consistent growth in tourist trips up until 1999 although the amount of spend fluctuated (Figure 3.3a,b). FMD caused a sudden drop of around 25% in terms of trips and spend in Dumfries and Galloway in 2001. However there are now clear signs of strong recovery in the region's tourism business, assisted by a strong marketing response and additional financial resources from Dumfries & Galloway Council and the Scottish Executive (Scottish Enterprise, 2005). As previously noted, the main market for Dumfries & Galloway is UK domestic tourists, with only 3% of all trips to the region made by overseas visitors of which the main markets are Germany and the USA (VisitScotland, 2004a). These are also the main overseas markets for Scotland as a whole (VisitScotland, 2006). The majority of UK domestic trips are made by English visitors (58%) followed by Scottish residents (38%). Most domestic (34%) and overseas trips (44%) to the region are made between July and September, and the lowest number of domestic trips are taken between January and March (VisitScotland, 2004a). In comparison to Scotland as a whole, the tourist season in Dumfries & Galloway is peaked; however recent stakeholder efforts through the Making Tracks project and the development of niche products are attempting to provide a more even balance of trips throughout the year. Based on the most recent available statistics for the region (2003) (VisitScotland, 2004a) this spread of trips has yet to materialise.

**Figure 3.3 Tourism trips and expenditure trends**



(Sources: data from VisitScotland, 2006; www.staruk.org.uk. Data unavailable for Dumfries & Galloway post-2003 and 2004 for Scotland. 2005 figures for Scotland are not strictly comparable due to different methods used to collect data)

Mirroring Scotland as a whole the ‘visiting friends and relatives’ (VFRs) market in Dumfries & Galloway is important with 17% of tourists visiting the region for this purpose (VisitScotland, 2004a). Most people however come for a holiday (75%) and a small number for business (7%). Most visitors to the region stay in caravan/campsites (31%), three times the Scottish average. 26% make use of friends

and relatives homes while in the region, 19% use hotels/guests and 16% make use of self-catering or bed & breakfast. The short-break market, 1 – 3 nights, is the main market in Dumfries & Galloway (60%) and this is also true of Scotland as a whole (VisitScotland, 2004a). One third of visitors stay up to one week in the region although the average length of stay is 3.7 nights.

Frochot (2005) provides us with some additional information on the types of rural visitors found in Dumfries & Galloway. Her segmentation exercise reveals how the term 'rural tourist' hides the fact that several sub-segments of visitors exist. She identifies four sub-segments of visitors based on the benefits sought. These include 'actives' on account of their propensity to undertake sporting activities such as long walks, horse riding and cycling, etc. While a proportion of these types of visitors were found in Dumfries & Galloway, Frochot (2005) concludes that the region is more attractive to other sub-segments named 'relaxers' and 'rurals'. As the name suggests, relaxers mainly seek relaxation from their holiday experience. They tend to have a lower participation rate in most activities apart from golfing and fishing. Rurals, on the other hand, are identified as visitors most interested in the rural dimension of their holiday such as experiencing rural life and a different culture. The other sub-segment of rural tourist that Frochot (2005) identified was 'gazers', and these are visitors who had an interest in the outdoors aspect of their holiday mixed with an aspiration to relax. Gazers were also present in Dumfries & Galloway but smaller in proportion to rurals and relaxers. Frochot's study is interesting in the way it segments rural visitors and the current study also aims to achieve this using environmental attitudes as the main leverage of distinguishing between rural visitors. It should also be noted that Frochot's study represents a snapshot of visitors at a particular time, and the types of visitors that a region such as Dumfries & Galloway attracts will change in response to new developments. For example, Dumfries & Galloway is currently developing its portfolio of activities including several mountain biking trails (under the 7stanes project). If such activities prove popular then it is possible that the proportions of actives, gazers, rurals and relaxers will also change.

This short chapter has justified the appropriateness of Dumfries & Galloway in achieving the aims of this thesis. It has provided a brief description of the region and highlighted some key aspects of the regional tourism product.

## CHAPTER FOUR

### 4 METHODOLOGY

#### 4.1 Introduction

This chapter sets out the methodology used in addressing the aims of the thesis. It begins by discussing methodology and epistemology generally before the epistemological framework of this thesis is discussed. The chapter then sets out the qualitative and quantitative methods used to generate the primary information required to address the research aims. Ethical issues relating to the research are also discussed. The procedures undertaken and the transparency with which these are reported serve to highlight the replicability and reliability of the findings.

#### 4.2 Methodology and epistemology

Methodology involves much more than just stating the methods and procedures for carrying out the research (Hoggart *et al.*, 2002; Holt-Jensen, 1999). It includes issues of ontology and epistemology, which can influence the methods used to generate information about some phenomenon which is thought to exist. Epistemology is the conceptual or theoretical framework within which research is conducted, describing what constitutes valid knowledge or a particular kind of knowledge such as scientific knowledge (Hoggart *et al.*, 2002). A methodology describes the actual ways in which research is carried out or the means by which social scientists gain access to the world (Murdoch and Pratt, 1994).

In many social science disciplines, such as human geography, it is not uncommon for methodologies to be aligned with specific epistemological positions. For example, social constructivist, critical theorist, feminist and post-modern epistemological positions are often associated with qualitative methods such as in-depth interviewing and focus-groups (Aitchison, 2005; Jennings, 2005). These epistemological stances often hold a worldview, or ontology, that recognises multiple perspectives in regard to the research focus (Grey, 2004). In comparison, positivist epistemological positions posit an objective stance and operate from an ontological perspective that

supports value-free universal truths (Grey, 2004). Positivists are therefore often associated with quantitative methodologies using tools such as questionnaires or structured interviewing.

As a subject of inquiry, rural tourism has received attention from many different perspectives and across numerous different disciplines such as geography, sociology, business and anthropology. This has led to a variety of different epistemological stances and different methodologies being used to address problems. The hybridisation of research approaches in tourism research is, according to Phillimore and Goodson (2004: 20), "indicative of the interdisciplinary nature of tourism and the influence of research practices that have been imported from other, non-tourism disciplines". These authors suggest that having no fixed disciplinary boundaries and associated methods is a particular strength of tourism research allowing combination of a free-range of "approaches and even research paradigms to give a more fluid approach to research" (*ibid.*). They continue to suggest that "the experimental nature of this type of research could be argued to increase the potential for discovery" but warn that researchers "may struggle to position themselves from an epistemological perspective with the field" (*ibid.*).

Many studies of tourism utilise a single quantitative approach in generating information, the most common being the self-administered questionnaire (Floyd *et al.*, 1997; Hill and Busby, 2002; Kaynak and Yavas, 1981; Sharpley and Vass, 2006; Uysal *et al.*, 1994; Weaver and Fennell, 1997; Weaver and Lawton, 2005). In some cases the use of questionnaires is justified because of the research subjects. For example, Hill and Busby (2002) favoured questionnaires when surveying farmers across Devon, south-west England, because the sample consisted of 'working farmers' who were perceived to have limited spare time (Hill and Busby, 2002). These researchers did, however, include open-ended questions, which they cite as a qualitative approach, allowing the respondent to express freely further comments, attitudes or experiences. This approach however does not allow the researcher to probe deeper or pick-up on issues which may have been raised, nor does it allow for the exchange of ideas which qualitative approaches advocate (Jennings, 2005). The frequent use of questionnaires in studies of farm-based tourism perhaps reflects

practical considerations including the time constraints of farmers and the dispersed nature of farms over large geographical areas, rather than epistemological stance.

Tourism offers significant scope to embrace a qualitative epistemology and associated methods (Ryan, 1995). Phillimore and Goodson (2004) and Ritchie *et al.* (2005) explore these possibilities in their respective edited collections of tourism research methods. Berry and Ladkin (1997) used an interpretive epistemological stance to study small tourism businesses and the concept of sustainable tourism, using focus groups to generate an in-depth understanding of the topic under investigation. Other studies have embraced a mixed method approach utilising both qualitative and quantitative methodologies (Carey *et al.*, 1997; Clarke, 1996a, 1999; Firth and Hing, 1999; Getz and Carlsen, 2000; Gladstone and Morris, 2000; Mackay and Campbell, 2004), although epistemological stances are seldom explained.

While questionnaires remain an important instrument in generating data on aspects of tourism (Sharpley and Vass, 2006; Weaver and Lawton, 2005), there appears to be growing support for adopting qualitative approaches in addressing tourism problems (Riley and Love, 2000). The use of qualitative methodology as an inferior substitute to 'real', rigorous, 'scientific', quantitative studies has been questioned over the last 25 years in many social science disciplines (Phillimore and Goodson, 2004) and largely discounted. Those that view qualitative research as just a set of methods have, in Silverman's (2000) opinion, failed to appreciate the assortment of forms and functions of qualitative research. Rather than being an adjunct to quantitative research, qualitative approaches to the study of social phenomena are now considered routine (Bryman, 2001; Hoggart *et al.*, 2002) although it has been noted that tourism researchers have been more hesitant in their adoption and acceptance of qualitative research (Phillimore and Goodson, 2004). The reasons for this are unclear but may partly relate to the difficulty of engaging mobile subjects in qualitative exercises such as semi-structured interviewing.

As an epistemology, qualitative research places emphasis on appreciating the world from the standpoint of its participants and, according to Phillimore and Goodson (2004), should view social life as being the product of interaction and interpretations. Importance is also placed upon studying things in natural situations, interpreting



phenomena in terms of the meanings people bring to them, humanising problems and gaining an 'insiders' perspective. So qualitative approaches are not just about a set of methods, they are a way of approaching and performing research, and for some commentators this approach offers an opportunity to accentuate, then remedy, the so-called inadequacy of 'natural science' methods which underpin quantitative research (Denzin and Lincoln, 1998).

It is argued here that quantitative approaches are just as useful in generating information as qualitative approaches, and are only inadequate when the questions or aims of the research can not be met using a quantitative approach. It is an inaccurate assumption that qualitative methodology is superior to quantitative methodology. This depends on the questions being asked, the purpose of the research and also the subjects of study. One must remember that tourists are usually on holiday to enjoy themselves and escape the everyday and mundane. Engaging visitors in qualitative research, such as focus-groups or semi-structured interviews, requires a significant time commitment and a departure from normal holiday experiences and could inconvenience visitors. Quantitative techniques such as questionnaires, on the other hand, are less intrusive and can be completed by a participant in their own time. Through careful design, and acknowledging the limitations of a single method approach, one can integrate qualitative and quantitative approaches to address research aims. This said, this research recognises the advantages of multi-method approaches where they can be used appropriately, without inconveniencing respondents.

#### *4.2.1 Epistemological framework of the research*

This thesis represents an inter-disciplinary effort which cuts across subjects such as geography and environmental sociology and follows a 'mixed method' approach in which both qualitative and quantitative methods are used to address the research aims.

Although epistemological-methodological linkages obviously exist in some social research, there is reluctance to place this research in any particular epistemological

camp owing to the mixed method approach used to address the research aims. Epistemology is therefore seen as informing rather than dictating the choice of methods. Whilst this study does not favour one epistemological stance over another, the research has been influenced by epistemological stances.

My own background probably influenced my research approach, in that both my undergraduate and postgraduate degrees drew heavily on positivist epistemology as is common within environmental sciences. My baptism into the social sciences has not been an easy journey, but has been fruitful in bringing an array of different ontological and epistemologies perspectives to light and in particular highlighting the benefits of qualitative methodologies in addressing social problems and the limitations of quantitative methodologies in explaining complex situations. As will become clear this research has been influenced by both. This research has also been influenced by the literature surrounding rural tourism and farm-based tourism, which draws mostly on quantitative methodologies. Such an alignment with the literature allows comparisons with this research to be made.

This thesis acknowledges the criticisms of quantitative approaches in addressing social phenomena and in particular universal truth claims about complex social entities and the limited ability to delve deeper and understand the meanings behind responses (Jennings, 2005). Similarly, it appreciates that qualitative approaches fail to provide a general picture of some dispersed social phenomenon. It was considered appropriate, therefore, to develop a mixed method (-ology) appropriate to the exploratory nature and aims of the research. In doing so, qualitative methods were employed as a means of gaining an 'insider' perspective and allowing deeper and 'thick' descriptions to enrich and co-exist alongside quantitative data. The benefits of combining quantitative and qualitative have been noted by McLafferty as "coupling the power of the general with the insight and nuance of the particular, [in that] such research illuminates people's lives and the larger contexts in which they are embedded" (McLafferty, 1995: 440).

Another benefit of using a mixed method approach to address research aims includes the ability to circumvent potential inadequacies of single data sources. In other words, the thesis employs 'triangulation' to check responses that have been

generated using different methods, and where responses coalesce, conclusions can be given with greater confidence because of reduced bias (Beeton, 2005; Hoggart *et al.*, 2002).

In summary, this thesis does not embrace one epistemological stance over another. It recognises the benefits of adopting a mixed method approach which clearly cuts across radically different epistemologies and ontological perspectives.

The following sections describe the quantitative methods (Section 4.3) and qualitative methods (Section 4.4) used to gain access and gather information.

### **4.3 Quantitative methods**

The main quantitative method used in this thesis is the self-administered questionnaire. In studies of tourism questionnaires remain an important method for generating information about visitors and businesses. Priskin (2003) used a questionnaire to generate a large amount of data in order to profile the characteristics and perceptions of independent nature-based tourists in Western Australia, while Sharpley and Vass (2006) continued the tradition of using self-administered questionnaires to assess farmers' attitudes towards a variety of issues relating to diversification into tourism. VisitScotland along with the other bodies responsible for tourism in the UK also collect data on an annual basis using quantitative approaches, the results of which are often used in policy documents including Scotland's new tourism strategy (Scottish Executive, 2006a).

The use of questionnaires in this thesis has been influenced by the wide use in generating similar information about tourism businesses and visitors (Albrecht *et al.*, 1982; Carlsen *et al.*, 2001; Clarke, 1999; Denman, 1994a; Gladstone and Morris, 2000; Higham *et al.*, 2001; Hill and Busby, 2002; Ilbery *et al.*, 1998; Uysal *et al.*, 1994; Weaver and Fennell, 1997). Although quantitative methods can allow for generalisation about a population through the use of statistical techniques, they often fail to solicit underlying factors which qualitative techniques expose (Robson, 1993). A trade-off has to be made between obtaining a relatively small sample from which

very detailed, in-depth information is received (intensive), or choosing a larger sample from which less detail but greater breadth of information is received (extensive). In this thesis, the quantitative data provide a general picture while the qualitative informative provides depth to certain answers.

#### *4.3.1 Measuring environmental attitudes of visitors to Dumfries & Galloway: methods of data collection, sampling and analysis procedures*

One of the main aims of this thesis is to identify the environmental orientations of visitors to Dumfries & Galloway and compare their characteristics. A self-administered questionnaire format was considered the most appropriate method of generating this information. This decision was made following a pilot study using a face-to-face format that revealed the questions relating to environmental attitudes required considerable reflection by the participants and took too long to complete.<sup>23</sup>

As mentioned in the literature review, the main tool used in the self-administered questionnaire to solicit the environmental attitudes of visitors to Dumfries & Galloway was the New Ecological Paradigm scale (Dunlap *et al.*, 2000). This scale comprises fifteen questions with responses measured on a five-point Likert-scale. The scale developers claim that the questions measure 'primitive beliefs' about the human-nature relationship and that the scale is responsive to personal experiences with environmental problems (Dunlap *et al.*, 2000). This is a widely used scale which has been found to be both valid and reliable in assessing environmental attitudes (Albrecht *et al.*, 1982; Dunlap *et al.*, 2000; Lück, 2003; Noe and Snow, 1990; Uysal *et al.*, 1994). Accompanying the scale are demographic questions generic to most questionnaires (Peterson, 2000), and other questions addressing issues such as the concept of ecotourism and recycling behaviour. The questionnaire used in this research can be viewed in Appendix A.

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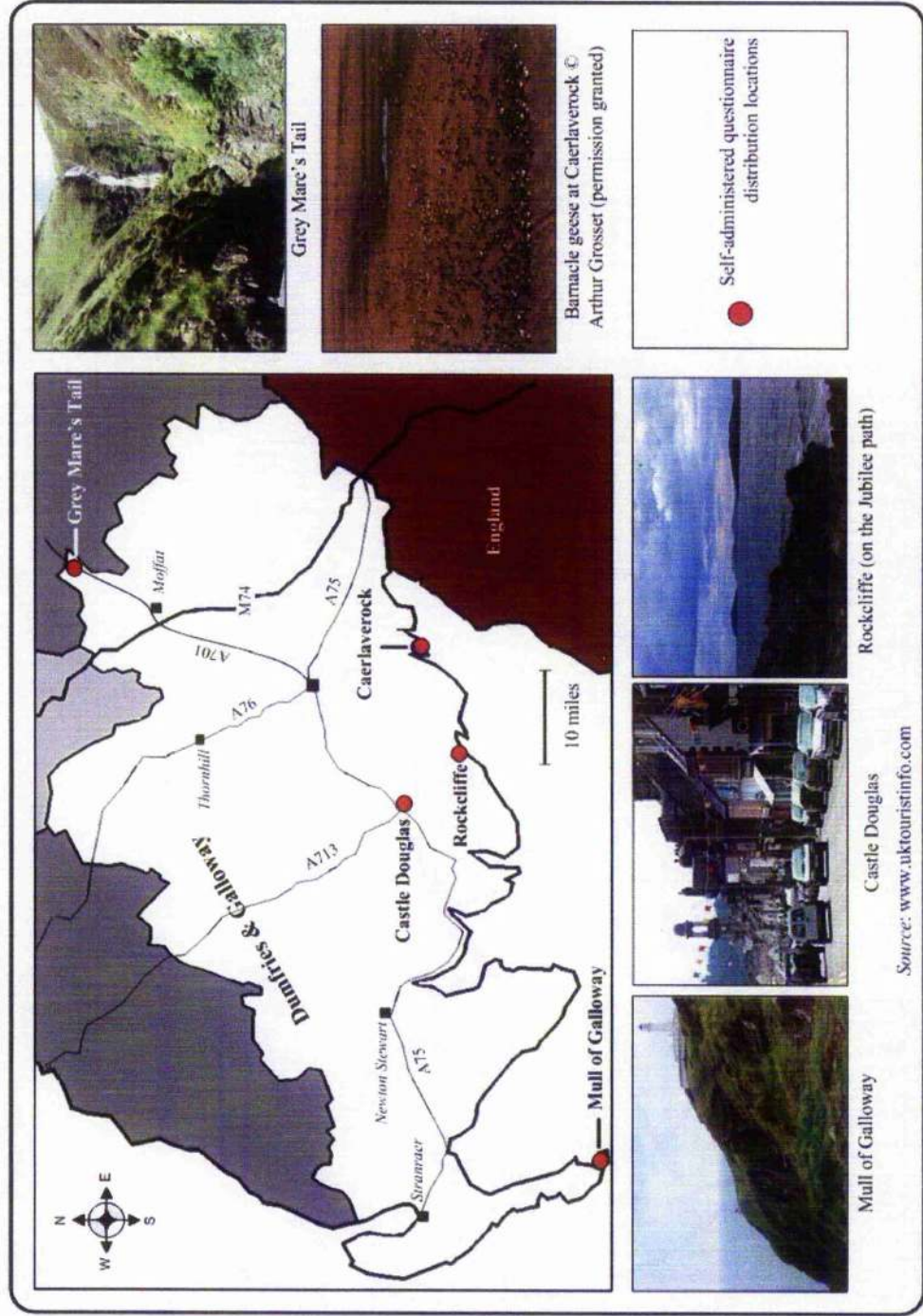
<sup>23</sup> The face-to-face survey was piloted, with permission, at the Wildfowl and Wetlands Trust's (WWT) visitor centre car park at Caerlaverock National Nature Reserve in March 2003. The sampling strategy adopted was on a next-to-return to their vehicle basis. In total 12 participants were interviewed. It was estimated that each face-to-face questionnaire would take 15 minutes to complete, however this time proved to be too short because some of the questions relating to environmental attitudes needed repeating. It was therefore decided to change the format of the questionnaire from a face-to-face structure to a self-administered questionnaire. This would allow visitors to complete the questionnaire in their own time and avoid a lengthy and inefficient interview process.

Like all other self-administered questionnaires used in this thesis the visitor questionnaire discussed here was designed to facilitate ease of completion including clear sections, careful wording and appropriate spacing (Hague and Jackson, 1999; Peterson, 2000). The questionnaire is not excessively long in order to encourage a good response rate (Edwards, *et al.*, 2002). Following Robson's (1993) advice on designing self-administered questionnaires, the visitor questionnaire avoided open-ended questions which can be time consuming and difficult to code. Likert-scales are used alongside limited response questions which often include an 'other' category to capture answers not accounted for. Potential answers to questions were not coded on the actual questionnaire since responsibility for the data input is the responsibility of the researcher; however a separate coding sheet was created to facilitate the transfer of responses to the database.

The self-administered questionnaire was packaged together with a pre-paid self-addressed envelope and a covering letter explaining the purpose of the research with the contact details of the researcher and an assurance of anonymity for respondents (Peterson, 2000). The important contribution that visitors would make to the research was stressed to encourage the return of the questionnaire (Childers *et al.*, 1980). The self-administered questionnaires were distributed to potential participants at five locations throughout Dumfries & Galloway (Figure 4.1). The locations were chosen for their ability to yield both visitors with an interest in nature-focused activities and more general visitors, thus allowing the sample to be split and tested for differences in environmental attitudes.

The Caerlaverock location has wildlife watching facilities at the Wildfowl and Wetlands Trust centre and attracts visitors with a specific interest in nature (birds in particular) and more general rural visitors. It tends to be busier during the winter months when the site supports in excess of 20,000 Svalbard Barnacle geese, however the visitor facilities (tea room, etc.) are used all year round. The town of Castle Douglas was chosen as a survey distribution location for its ability to yield general rural visitors. Questionnaires were distributed on King Street outside the tourist information centre.

Figure 4.1 Self-administered questionnaire distribution locations



The Mull of Galloway is Scotland's most southerly point offering scenic views (on a clear day) towards Cumbria, Ireland and the Isle of Man. It is therefore an attraction for this reason alone, although it is also a location which harbours a diversity of wildlife managed by the RSPB. The Mull of Galloway site was therefore chosen for its ability to attract both nature-focused and general rural visitors. Grey Mare's Tail, north-east of Moffat, is one of Scotland's highest waterfalls at 200 feet (McEwen and Werritty, 1997). The waterfall drains Loch Skene which is situated in a 'hanging valley'. This site is managed by the National Trust for Scotland (NTS) and has a seasonal ranger service located in a small basic visitor facility next to the car park. This location is particularly attractive to hill-walkers and general sightseers, but also attracts visitors with a specific interest in flora and fauna because of rare upland plants, peregrines, ring ouzels and feral goats.<sup>24</sup> It was therefore selected for its ability to attract these types of visitors. The Rockcliffe to Kippford Jubilee path is a coastal walk also managed by the NTS. This footpath passes through various habitats with the opportunity to view wildlife, however it is the scenic value of this location which makes it an ideal location for intercepting general rural visitors.

All locations selected as sites for distributing the questionnaire are promoted through official tourism brochures and are therefore suitable locations for generating information from visitors. Questionnaires were distributed by hand to visitors who could then complete them in their own time and post completed forms back to the researcher. It was considered important to make contact with potential participants (even if the survey was self-administered) to encourage a better response rate, rather than leaving the questionnaires at available visitor centres.

The sampling strategy involved approaching visitors on a 'next to pass' basis (Higham and Carr, 2002; Tubb, 2003) since many of the locations were relatively remote and visitor numbers sometimes low.<sup>25</sup> Visitors were approached on return to their vehicle in an attempt to minimise inconvenience. This was not possible at Castle Douglas as there are many places where visitors could park. After establishing that they were visitors to the region, an explanation of the research was given before

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<sup>24</sup> Personal communication with NTS ranger, August 23, 2002.

<sup>25</sup> Visitation levels at the Mull of Galloway, Rockcliffe and Grey Mare's Tail, were especially low during the winter and spring months.

asking if they would be willing to participate. Most potential participants were in groups of two or more, so in order to determine which person took responsibility for filling in the questionnaire the 'birthday method' was adopted. The 'birthday method' involves asking who out of the group has the next birthday and then asking that person to fill in the questionnaire (over 16 years old). This approach helps to reduce potential bias by randomly selecting one person from the group and not just the most responsive (Huddleston and Keirle, 2002).

The questionnaire was distributed to visitors from April 2003 to February 2004, taking into consideration all seasons including the winter months when nature-focused visitors descend on Caerlaverock to gaze at the Barnacle geese. Several visits were made to each location throughout this period (Table 4.1).

**Table 4.1 Visits to questionnaire distribution locations, number of questionnaires distributed and returns**

<b>Location</b>	<b>Number of visits</b>	<b>Number of self-administered questionnaires distributed</b>	<b>Number of questionnaire returns</b>	<b>Usable returns</b>
Mull of Galloway	8	35	18	16
Castle Douglas	3	59	35	25
Rockcliffe	11	43	17	17
Caerlaverock	5	53	43	38
Grey Mare's Tail	12	29	15	11
<i>Total</i>	<i>39</i>	<i>219</i>	<i>128</i>	<i>107</i>

In order to generalise about the total population within a 5% margin of error at the 95% confidence level, the number of usable questionnaire returns needed was calculated at 384.<sup>26</sup> It became apparent that this was unlikely to be achieved owing to the relatively low numbers of visitors at Mull of Galloway, Rockcliffe and Grey Mare's Tail on the days when the surveys were being distributed. This demonstrates the difficulties of surveying a dispersed mobile population of rural visitors. Even in the peak months of July to September, when over 350,000 trips are taken to Dumfries & Galloway (VisitScotland, 2004a), the region can still feel relatively

<sup>26</sup> The figure of 384 is based on 1 million visitors to Dumfries & Galloway each year (VisitScotland, 2004a).



empty (a quality favoured by visitors), especially in some relatively remote locations. Nevertheless, the 107 usable questionnaires fall within a 10% margin of error at the 95% confidence level. Financial and time limitations prevented further distribution of questionnaires at the various sites. The overall self-administered questionnaire return rate, excluding those that were unusable because not all participants had answered all of the NEP questions, was 48.9%. This is a good return rate in comparison to other studies using self-administered questionnaires (Pennings *et al.*, 2002).

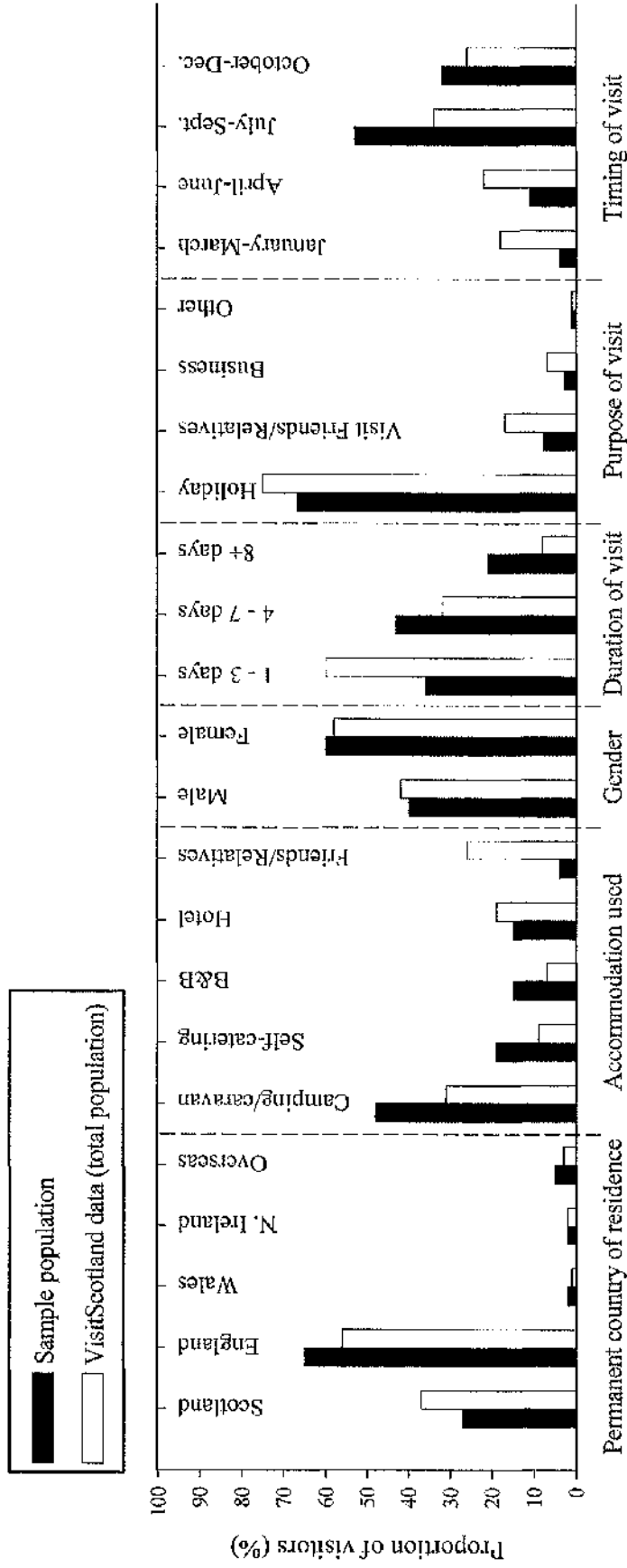
It is important to check that the sample population obtained via the questionnaires is broadly representative of the known total population from which it is drawn (Ryan, 2005). In Figure 4.2 some comparisons are made between the sample of visitors generated through the questionnaires and data generated by VisitScotland for the total population of visitors (VisitScotland, 2002, 2004a).<sup>27</sup> While one would not expect the sample population to match exactly the total population it is evident that there are clear similarities with regards to the permanent country of residence, gender and purpose of visit. In terms of accommodation used, the sample population is similar to the total population in that visitors tend to make greater use of camping/caravan sites. However, fewer participants in the sample population utilise accommodation supplied by friends/relatives. There is also a difference with regards to the duration of time spent in the region, with the sample population staying longer than the total population as suggested by VisitScotland (2004a). Although the trend is similar, the timing of the visit reveals that most of the sample population were visiting between July and September. This partly reflects the fact that most self-administered questionnaires were distributed during this period owing to the increased volume of visitors at distribution locations. Overall, there appear to be many similarities between the sample and total population (as suggested by VisitScotland data) and therefore one can be confident that the data collected in the self-administered questionnaire are representative of the total population.

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<sup>27</sup> Although it has to be borne in mind that VisitScotland data are generated in a different way (usually phone interviews) from the current study.

Figure 4.2 Comparison of sample population and total population of visitors

The total population figures were taken from VisitScotland (2002, 2004a)



Analysis of the questionnaire data was facilitated through SPSS (version 12), where statistical procedures such as One-Way ANOVA allow for comparisons to be made between environmental attitudes and different characteristics of the sample population.<sup>28</sup> Differences between values at the 0.05 level are typically taken to represent statistically significant differences (Field, 2000). Post-hoc tests such as Tukey's Honestly Significant Difference (HSD) have also been used to determine which means differ (Corston and Colman, 2003). This is particularly useful when there are three or more categories. Other analytical tools used include cross-tabulations of variables and the Pearson Chi-square statistic ( $\chi^2$ ). This goodness-of-fit test compares the observed and expected frequencies in each category to test that all categories contain the same proportion of values or that each category contains a user-specified proportion of values (Field, 2000).

The New Ecological Paradigm scale used in the questionnaire to determine the environmental attitudes of visitors has been tested using Factor Analysis in order to determine if the set of fifteen questions adequately measure a single construct or several factors (Dunlap *et al.*, 2000). Cronbach's coefficient alpha is used as a means of assessing how well the fifteen questions of the NEP represent a one-dimensional construct (Lück, 2003). The adequacy of the sample size is tested using the Keyser-Mayer-Olkin (KMO). The results of these procedures and tests are detailed in Chapter five.

#### *4.3.2 Generating information from farm-based accommodation businesses in Dumfries & Galloway: the creation of a sampling frame, methods of data collection, sampling and analysis procedures*

The second major focus of this thesis is farm-based tourism. More specifically, the second set of aims address farm-based accommodation and its role as both a form of sustainable rural tourism and as a means of sustaining families facing the post-

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<sup>28</sup> The One-Way ANOVA procedure produces a one-way analysis of variance for a quantitative dependent variable by a single factor (independent) variable. Analysis of variance is used to test the hypothesis that several means are equal. For example the mean NEP score of nature-focused visitors and the mean NEP score of general rural visitors. This technique is an extension of the two-sample t-test.

productivist transition. Multiple reinforcing methods are used to address the research aims; however this section concentrates on the quantitative methods used.

Before the methods of data collection are discussed it is important to reveal how the sampling frame was created. In other studies of farm-based tourism researchers have drawn most of their sample from single sources such as the 'Stay on a Farm' brochure published annually by the Farm Holiday Bureau (now Farm Stay UK) (Clarke, 1996b). Although this is the UK's largest farm tourism consortium (Sharpley and Vass, 2006), relatively few Scottish farm-based accommodation providers are members.<sup>29</sup> Given the unsuitability of this source as a sampling frame for contacting farm-based accommodation providers in Dumfries & Galloway, efforts were focussed on scrutinising a wide range of different publications and websites in order to identify the extent of farm-based accommodation in the region (see Box 4.1 below). Sharpley and Vass (2006) used a similar approach in establishing their sampling frame for farm-based accommodation in Northumbria and Yorkshire. Following definitions of what constitutes farm-based tourism, as discussed in Chapter two, the terms 'on a working farm' or 'on a farm' were used to distinguish farm-based tourism enterprises from other types of rural accommodation, however where text was limited and no clear distinction could be made, the owner was contacted to verify if the accommodation enterprise was on a working farm.

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<sup>29</sup> In the 2001 'Stay on a Farm' edition, the brochure listed over 1,000 farming families offering accommodation, of which 101 were located in Scotland and only 6 in Dumfries & Galloway. By 2003, only 61 farming families listed properties in Scotland and only one in Dumfries & Galloway. This increased in 2005 to two farming families listing accommodation in Dumfries & Galloway and 70 in Scotland as a whole.

## Box 4.1

### Information sources used to create sampling frame

#### Tourist Information Centre (Dumfries)

Operated by Dumfries & Galloway Tourist Board, the TIC provides a range of literature on accommodation and attractions throughout the region. Only members of the tourist board are advertised, therefore this source of information is not adequate on its own.

#### The Green Holiday Guide: GB & Ireland 2002/03

Guidebook produced by the European Centre for Eco-Agro tourism (ECEAT) which was set up by the Soil Association. Provides a list of accommodation in the UK and Ireland mainly on organic working farms.

#### [www.southernuplandway.com](http://www.southernuplandway.com)

A website dedicated to walking the Southern Upland Way. Has a search facility for accommodation in Dumfries & Galloway.

#### [www.cottageguide.co.uk](http://www.cottageguide.co.uk)

Offers a selection of 3,000 accommodation premises. At the regional level in Dumfries & Galloway 24 were identified some of which were on farms.

#### [www.straenraer.org](http://www.straenraer.org)

This website covers the communities of Straenraer, Cairnryan and Portpatrick and is part of a Small Towns Initiative (STI). The website provides a list of accommodation in the area many of which are on working farms.

#### [www.dalbeattie.com](http://www.dalbeattie.com)

This website hosts the only dedicated farm-based accommodation network of providers in the region. However, only 14 are listed and not all are working farms.

#### [www.scotfarmhols.com](http://www.scotfarmhols.com)

This is the website of Scottish Farmhouse Holidays. 2 listed in Dumfries & Galloway.

#### Stay on a Farm 2001, 2003 & 2005 editions

A dedicated farm-based accommodation publication and website operated by the Farm Holiday Bureau. The 2003 edition has only one listing for Dumfries & Galloway whereas the 2001 edition had six, although not all of these located on 'working farms'.

#### South of Scotland Organic Network

This organisation published a booklet providing the names and addresses of organic producers and processors. Provides information on organic farms that offer tourist accommodation.

#### [www.dgaccommodation.co.uk](http://www.dgaccommodation.co.uk)

Owned and managed by SuperWebs, a Dumfries & Galloway based company offering free accommodation listing. A description of the accommodation is provided that is useful for determining if the accommodation is on a working farm.

#### [www.organicholidays.com](http://www.organicholidays.com)

Organic holidays on organic farms and smallholdings throughout Europe. Searches can be narrowed down to 'south of Scotland'. A good description of the accommodation is provided along with links to the owner's website if they have one.

#### [www.hoseasons.co.uk](http://www.hoseasons.co.uk)

Provides a section on 'southern Scotland'. Only one farm-based accommodation provider was identified in Dumfries & Galloway.

#### [www.visitsouthernscotland.com](http://www.visitsouthernscotland.com)

Owned and operated by the same company as southernuplandway.com. Provides a comprehensive list of accommodation throughout southern Scotland.

#### Farmhouse Bed and Breakfast.co.uk

Free listing for farm accommodation providers in the UK. Only 5 listed in Dumfries & Galloway.

#### [www.scothols.co.uk](http://www.scothols.co.uk)

ScotHols is a Castle Douglas based booking service owned and managed by GM Thomson specialising in self-catering accommodation. Accommodation is not specifically farm-based, however information on properties often indicates if they are located on a working farm. Contact names are not provided on this website although addresses are supplied.

#### [www.visitscotland.com](http://www.visitscotland.com)

This website is operated on behalf of VisitScotland.org as Scotland's national accommodation booking service. It has a dedicated 'stay on a farm' webpage that provides access to names and addresses of farm-based accommodation providers in Dumfries & Galloway.

#### [www.wheretostay.uk.net](http://www.wheretostay.uk.net)

Over 25,000 tourist accommodations listed throughout the UK. Dumfries & Galloway is listed and searches performed based around the main towns in the region. Identifying farm-based accommodation is difficult and time-consuming.

#### [www.smoothound.co.uk](http://www.smoothound.co.uk)

Online booking agency for UK and Ireland. Different regions can be searched although navigation of this website was difficult at the time of writing.

#### [www.pets-on-holiday.com](http://www.pets-on-holiday.com)

A dedicated service for visitors wishing to take their pets on holiday with them. Searching revealed 25 accommodations in southern Scotland, some of which were on farms in Dumfries & Galloway.

#### [www.activity-scotland.co.uk](http://www.activity-scotland.co.uk)

The official website of the Scottish Activity Holiday Association. Information on places to stay in various regions of Scotland including Dumfries & Galloway.

Of particular value for identifying farm-based accommodation providers in Dumfries & Galloway was VisitScotland's website which provides a section named 'stay on a Scottish farm'.<sup>30</sup> At the time of writing this source of farm-based accommodation providers was the most comprehensive. However, when creating the sampling frame it could not be taken for granted that all farm-based accommodation operators in Dumfries & Galloway were members of VisitScotland. The other sources listed in Box 4.1 were therefore also important in identifying the true extent of farm-based tourism in the region.

In addition to the information sources identified in Box 4.1, a snowballing technique (Robson, 1993) was adopted in order to identify any enterprises which may have been missed through the website and literature search. The snowballing technique works by asking participants to nominate or identify another person or business, in this case a farm-based accommodation operator, who can be contacted (Scott, 2000). When the nominated person is contacted they too are asked if they know of any other people that have a similar business, and so on, until no new information is generated. What was satisfying about using the snowballing technique while phoning enterprise owners was that the database appeared to have captured most known farm-based tourism operators in Dumfries & Galloway.

Through the snowballing technique and the comprehensive literature and website searches a total of 137 farm-based enterprises were identified. This number was reduced to 110 individual farms with tourist accommodation after five visitor attractions were omitted and twenty-two people verbally confirmed that they were either no longer involved in tourism or were not on a working farm (despite advertising as such). This screening process was carried out by phoning each business owner or representing agency. In addition to phone numbers, the sampling database collected information on the name and address of the accommodation provider, the postcode of the accommodation, the type of enterprise (e.g. B&B, self-catering, etc.), the source of the contact (publication, website, other accommodation provider) and membership of VisitScotland's Quality Assurance scheme.

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<sup>30</sup> [www.visitScotland.com/accommodation/stayonafarm/](http://www.visitScotland.com/accommodation/stayonafarm/)

These 110 individual farm-based accommodation enterprises therefore represented the sampling frame and the population that were sent self-administered questionnaires. It is important to note that the 110 individual farm-based accommodation businesses, which is considered accurate of the total population when it was created (November 2002), will change over time as some farming households adopt tourism accommodation as a diversification strategy and others cease to operate their accommodation business or pull-out of farming.

The 110 farm-based accommodation businesses were sent self-administered questionnaires on two occasions (22 January 2003 and 2 May 2005).<sup>31</sup> The surveys were sent during periods when farmers are deemed to be less busy (Pennings *et al.*, 2002). Both questionnaires can be viewed in Appendix A. The second survey built on some of the responses in the first survey, and provided opportunities for participants to be expressive through the provision of open-ended questions and sufficient response space (Berry and Ladkin, 1997; Hill and Busby, 2002; Sharpley and Vass, 2006). Farmers are no strangers to self-administered questionnaires since they are subjected to various census and input-output questionnaires each year (SEERAD, DEFRA, etc.), therefore the self-administered questionnaires used in this research were not considered to be a problematic way of generating information about the farming family and the tourism enterprise.

The 2003 survey resulted in a total of 60 completed questionnaires giving a response rate of 54.5% with a total margin of error of  $\pm 8.57\%$  at the 95% confidence level. The 2005 survey achieved a response rate of 49%, which also fell within a  $\pm 10\%$  margin of error.

Comparison of the samples collected through the questionnaires with the total population show that the types of accommodation represented in the sample are similar in proportion to the total population (Table 4.2). The data generated through the questionnaires are therefore representative in this respect.

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<sup>31</sup> Participants were asked to return the questionnaires within three weeks of receiving them. After three weeks, 42 farm-based accommodation business owners had returned the 2003 questionnaire. Another letter and questionnaire was dispatched to encourage further response resulting in an additional 18 completed questionnaires.

**Table 4.2 Comparison between total population accommodation types and samples from the population**

<b>Accommodation type</b>	<b>Total population (%) (N = 110)</b>	<b>2003 sample (%) (N = 60)</b>	<b>2005 sample (%) (N = 54)</b>
Self-catering	54	45	59
Bed & breakfast	32	33	22
Mixture of accommodation types	9	20	17
Caravan/campsites	5	2	2

Like the other questionnaires used in this thesis, the data generated were analysed through SPSS allowing for statistical analysis to be performed. The statistics used are similar to those described in section 4.2.1, with the exception of Factor Analysis which reveals the underlying dimensions of a summated scale. The open-ended questions in the 2005 questionnaire were analysed using qualitative methods e.g. content analysis, which involved the identification of recurrent themes, coding responses and identifying direct quotations which could be used to provide examples of certain themes or issues.

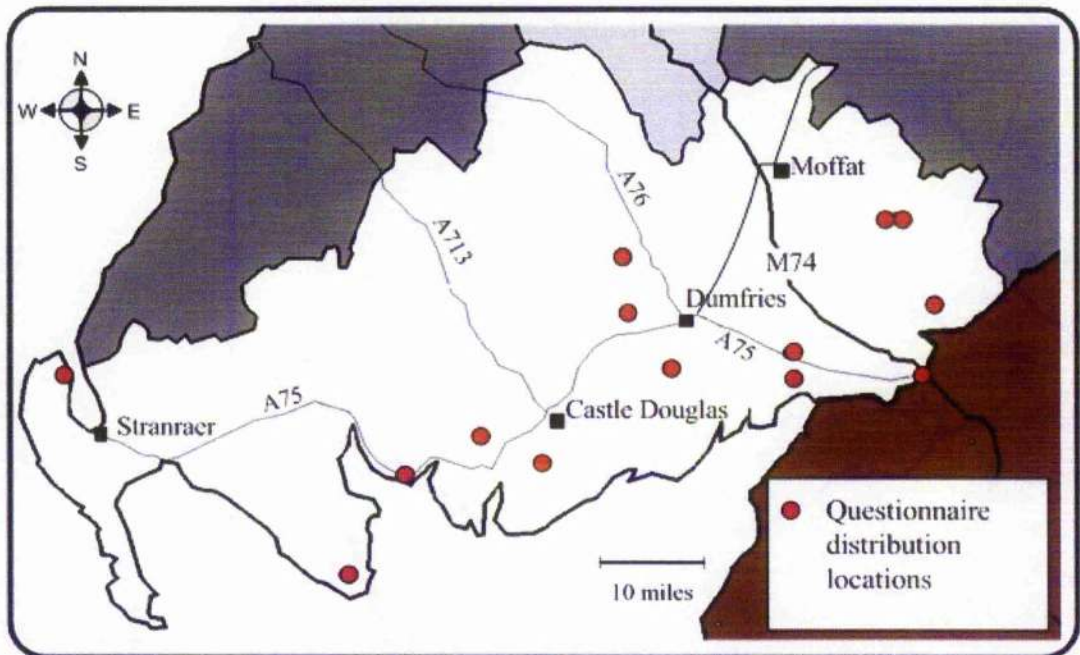
#### *4.3.3 Revealing the characteristics and attitudes of farm-based accommodation users in Dumfries & Galloway*

A feature of the research is to reveal the characteristics and attitudes of users of farm-based accommodation in the region. Little is known about farm accommodation users in Dumfries & Galloway and what they think of this form of accommodation. The method employed to extract this information was again a self-administered questionnaire (shown in Appendix A). Along with a cover letter and pre-paid self-addressed envelope, self-administered questionnaires were given to fourteen farm-based accommodation providers who indicated they would be willing to distribute questionnaires to their guests (one per group).



The fourteen farm-based accommodation providers are representative of the proportions and types of accommodation found in the region<sup>32</sup> and their locations are geographically spread throughout Dumfries & Galloway (Figure 4.3).

**Figure 4.3** Location of accommodation enterprises where questionnaires were distributed from



A total of 270 questionnaires were given to the fourteen farm-based accommodation providers from April 2003 and December 2003. The number of completed questionnaires received was 122 giving a good return rate of 45.2%. Although it is unknown what proportion of all visitors to Dumfries & Galloway make use of farm-based accommodation, if one roughly estimates that 0.16 million people use farm accommodation in the region each year<sup>33</sup>, then the sample of 122 falls within a  $\pm 10\%$  margin of error at the 95% confidence level. No data currently exist to assess how representative the sample of farm-based accommodation users is in comparison to the total population, therefore the findings are exploratory in nature. Similar statistical procedures to those already mentioned, which aid the analysis of the results

<sup>32</sup> Six self-catering enterprises, seven bed & breakfast enterprises and one caravan/campsite.

<sup>33</sup> This estimate is not based on any available evidence. Taking all visitors who use B&B and self-catering in the region (see Chapter 3, section 3.3), the most frequent form of farm-based accommodation, some 160,000 people use these facilities.

(One-Way ANOVA, Chi-square tests), have been used in the reporting of the findings.

#### 4.4 Qualitative methods

The main qualitative method used was the semi-structured interview (Table 4.3). This method allowed the researcher to address key themes of interest, while at the same time allowed flexibility to diverge from the main themes to explore emergent issues (Robson, 1993). This flexible agenda was important as it allowed participants to voice issues beyond the key themes of the interview that were not previously identified by the researcher as important. Unlike self-administered questionnaires, the semi-structured interview allows the researcher and the researched to probe for meanings and clarification behind responses or questions.

**Table 4.3 Qualitative methods used in the thesis**

Qualitative method	Participant (s)	Number	Location	Duration (per person)	Type of analysis
Semi-structured interview	Farm-based tourism operators	13	Participants home	1-1.5 hrs	Content analysis
Semi-structured interview	Visitors to Dumfries & Galloway	32	Visitor attractions/facilities	15-20 min	Content analysis
Semi-structured interview	Managers of nature-based attractions	5	Participants work environment	1-1.5 hrs	Content analysis
Unstructured phone interview	Former farm-based tourism operator	1	Office - home	20 min	Content analysis
Semi-structured interview	Local Enterprise Company	1	Participants work environment	1 hour	Content analysis
Semi-structured phone interview	VisitScotland/Tourism and Environment Forum	1	Office - Office	1 hour	Content analysis

The above table shows the details of the research. One interview with a former farm-based tourism operator was conducted in an unstructured manner. This interview was not planned, but developed when phoning farm-based accommodation providers to check if they were still operating. This participant was enthusiastic to share her

experiences and revealed interesting reasons why she pulled out of accommodation provision. Though this unstructured interview was not recorded, notes were taken during the interview.

A number of generic procedures were followed in organising and conducting the semi-structured interviews with participants. With the exception of the unstructured interview mentioned above and the visitors to Dumfries & Galloway who were approached in the field and interviewed, all other participants were sent letters explaining the purpose of the research and inviting stakeholders to participate. Follow-up phone calls with potential participants verified participation and allowed for a time and location to be negotiated. Interviews were held or conducted in an environment familiar to the participant helping to put the interviewee at ease and minimise inconvenience to the contributor. In the case of the farm-based accommodation providers, it allowed the researcher to experience the spaces where tourism and agriculture co-exist and aided understanding of some of the practical difficulties faced by tourism operators.

Another generic procedure with all interviewees was rapport building which allows the researcher and participant to establish a social relationship as well as trust and respect (Jennings, 2005). As an important ethical consideration, interviewees were assured anonymity and told that information generated through the interviews would only be used for the research project (Lewis, 2003; Ryan, 2005). All interviewee participants were also asked if they agreed to being recorded.<sup>34</sup> There were no objections. All recorded interviews were transcribed and content analysis conducted by reading and re-reading the transcripts and highlighting issues and emergent themes. Categories were generated from reading, annotating and coding. This approach involves reflection and questioning of assignment of codes and categories and the real-world context.

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<sup>34</sup> The exception being the unstructured interview which was not recorded. The recording device used for all semi-structured interviews was a Marantz RB-430.

#### *4.4.1 Interviews with farm-based accommodation providers in Dumfries & Galloway*

The purpose of conducting interviews with farm-based accommodation providers in the region was to generate a deeper understanding of this form of rural tourism. While the questionnaire is fundamental for creating the general picture, semi-structured interviews provide an opportunity to unravel and reveal the experiences of operators and meanings behind responses.

Twenty farm-based accommodation providers were randomly selected from the 110 businesses in the sampling frame<sup>35</sup>, thirteen were finally interviewed. Four potential interviewees declined the offer citing other commitments and time restrictions and three felt that their tourism business was unlikely to be of interest to the study. Semi-structured interviews are not a common method of generating information from farmers. As Hill and Bushy (2002) remark this may be due to the time-poor occupation of farming and willingness to devote time to speak with researchers. As mentioned previously, this problem can be addressed by contacting farmers during periods when farming activity is less intense. With this in mind, and the fact that tourism activity is typically less pronounced during the winter months in Dumfries & Galloway (VisitScotland, 2004a), the potential interviewees were contacted during November 2002 and February 2005.

There is no 'magic number' when it comes to the quantity of semi-structured interviews to conduct (Johnson, 2001), however some authors suggest that researchers should continue until a 'saturation point' occurs where little new information is generated (Glasser and Strauss, 1967). Given that this research also used questionnaires to address the research aims, the number of interviews conducted was considered adequate to enrich the study.

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<sup>35</sup> Each type of accommodation business (e.g. B&B, self-catering, campsite/caravan site, mixed accommodation) was organised into segments before a random selection within each type was made. This insured that all accommodation types were included for interviewing to avoid any potential bias towards one particular form of accommodation. More self-catering business owners were randomly selected for interview than any other form of farm accommodation because these are by far the most frequent type of business.

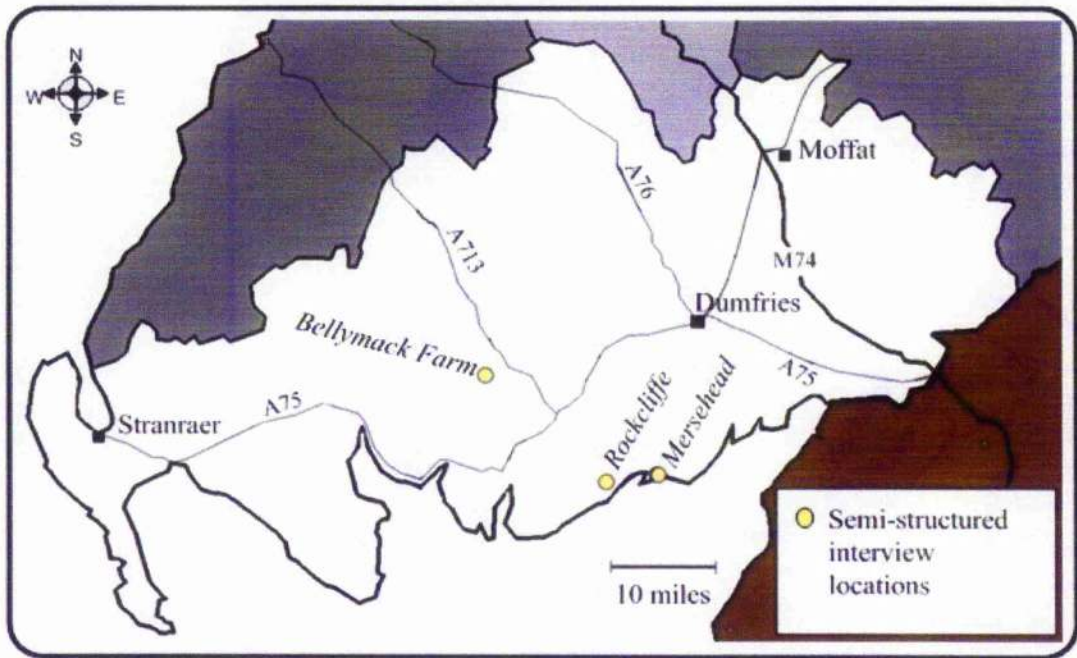
The thirteen farm-based accommodation owners interviewed represented six self-catering businesses, four B&B enterprises, and three businesses offering a mixture of accommodation types (self-catering and bed & breakfast). Unfortunately, no farm-based campsite/caravan park owners were willing to be interviewed, although some data were generated through the questionnaires on this form of farm accommodation. The different participants interviewed had businesses that varied in scale (number of bed-spaces offered) and economic importance (dependence on tourism revenue), therefore providing a range of views and experiences.

All interviews commenced with questions asking the participant to explain a little about their farming business and tourism business and the reasons for diversifying into tourism. Other themes addressed during the interviews included: visitor involvement on the farm, visitor activities around the farm, challenges of having a tourism business, who principally runs the tourism business, the benefits and problems of diversifying into tourism, future goals of the business, the environmental management of the tourism business, the concept of sustainable tourism, promotional material, the importance of the farm environment to visitors and educating guests.

#### *4.4.2 Interviews with visitors to nature-focused attractions in Dumfries & Galloway*

Interviews with visitors to nature-focused attractions in Dumfries & Galloway were conducted to supplement and support the data generated through the self-administered questionnaire. The semi-structured interviews were conducted at three locations (Figure 4.4), two of which are nature-focused sites. The Mersehead location is a nature reserve with a visitor centre on the Solway Firth coast managed by the Royal Society for the Protection of Birds (RSPB). The second location was the Rockcliffe to Kippford jubilee path. The third location, and second nature-focused site, was Bellymack Farm near Laurieston, a red kite feeding station and part of the Galloway Kite Trail.

**Figure 4.4** Semi-structured interview locations



Participants were randomly selected at these sites on a next-to-pass basis since low visitor flows did not allow for every other  $n$ th person to be selected. The interviews were conducted in June 2005. Thirty-two interviews were conducted in total. Interviews were kept short and visitors were approached on return to their vehicle so enjoyment of their visit was not compromised (Priskin, 2003). The interviews aimed to solicit information on the main motivations for visiting the region, likes and dislikes of the region, activities while in the region, types of accommodation used and environmental attitudes.

#### *4.4.3 Interviews with Managers of nature-based sites in Dumfries & Galloway*

Five interviews were conducted with managers of nature-based sites in the region to enable an analysis of the current sustainability of tourism in protected areas. The information generated through these interviews contributes to Chapter five.

The five interviewees have responsibilities, or influence the management and access to protected nature sites in Dumfries & Galloway (Table 4.4), and therefore were selected for the contribution they could make to the research. One of these experts

acted as a “gatekeeper” through which access to a further two interviewees was gained (Jennings, 2005: 107).

**Table 4.4 Interviewees**

<b>Organisation</b>	<b>Job title</b>	<b>Responsibilities/influences</b>	<b>Location</b>
Scottish Natural Heritage	Nature Reserve Manager	Overall management duties, site monitoring, visitor monitoring.	Caerlaverock (NNR)
RSPB	Area Manager (Dumfries & Galloway)	Responsible for the management of RSPB sites in Dumfries & Galloway	Mersehead, Mull of Galloway, Ken-Dee marshes, Wood of Cree
Scottish Natural Heritage	Access Officer (Dumfries & Galloway)	Encouraging sustainable access throughout the south of Scotland	South of Scotland
Dumfries & Galloway Council	Countryside Ranger	Management and development of Wigtown Bay Local Nature Reserve	Wigtown Bay and the west of Dumfries & Galloway
Scottish Natural Heritage	Nature Reserve Manager	Overall management duties, site monitoring, visitor monitoring.	Cairnsmore of Fleet (NNR)

The interviews were conducted in a semi-structured format allowing probing and emergent themes to develop. Although questions were tailored to each individual, the main themes addressed included: why people visit Dumfries & Galloway; the strengths and weaknesses of the region as a tourism destination; the role of nature conservation sites and how success is measured; ways in which protected areas help to sustain host destinations; visitor impacts and management techniques; nature-based tourism and seasonality; ecotourism, and environmental education. This information was used to feed into various sections of the research providing expert opinions with regards to sustainable nature-based tourism.

#### *4.4.4 Interviewing sustainable tourism officials*

Scottish Enterprise’s remit includes the promotion, growth and sustainable development of tourism in Scotland. With such an influential role it was considered important to interview those partly responsible for tourism development in Dumfries

& Galloway. It was anticipated that the information gleaned from the semi-structured interview would help to inform the chapter addressing farm-based tourism. An interview was organised and conducted in March 2005 at the Scottish Enterprise Dumfries & Galloway's main office. The participant asked for a copy of the questions prior to the interview.

The main issues addressed in the interview included: the strengths and weaknesses of the region as a sustainable tourism destination, the role of Scottish Enterprise in the development of tourism in the region, the ways in which sustainability is measured, in what ways businesses are supported, barriers which businesses face, the issue of seasonality and how Scottish Enterprise Dumfries & Galloway might assist in achieving sustainable tourism in the region.

It became evident that questions were being answered with reference to Scottish Enterprise publications. For example, when asked about the role of the organisation in supporting tourism regionally, the respondent replied by stating that a specific document gives a full account. Although this resulted in the researcher having reams of published material, it hindered the effectiveness of the interview. On reflection, this was probably due to the participant having the questions prior to the interview and her eagerness to provide as much official information as possible.

The main organisation with a remit for sustainable tourism development in Scotland is the Tourism and Environment Forum (TEF), recently renamed the 'Sustainable Tourism Partnership' (STP). The views of this organisation were therefore considered important for this research. Following a letter, an interview was organised with one of the organisation's main representatives and conducted via the phone (TEF is based in Inverness) in June 2005. The main themes of the interview included: the concept of sustainable tourism, the role of the Tourism and Environment Forum, existing sustainable tourism policy, social sustainability, issues of seasonality, nature-based tourism and ecotourism, environmental awareness, opportunities for Dumfries & Galloway, environmental management systems and eco-labels, and measuring progress towards sustainable development.



## 4.5 Conclusions

This chapter has presented the methodology and methods used to generate information. Issues of epistemology and ontology have been discussed, and it is argued that this research benefits from no fixed disciplinary boundary restricting the use of certain methods. Indeed, a mixed method approach utilising the depth of qualitative techniques, such as semi-structured interviews, with the generalising merits of quantitative methods, such as self-administered questionnaires, have been adopted to address the research aims effectively.

Both the quantitative and qualitative methods have been discussed in relation to the subjects of inquiry, and the benefits of using two different methodological approaches highlighted with reference to triangulation. The research methodology has considered ethical issues such as participant anonymity and has taken this into consideration in the design and writing of the thesis.

Reliability and validity are critical elements of any research methodology that aims to generate findings of value. Validity is embodied within a piece of research if the best set of methodological tools is adopted for the task in hand. The tools used in this thesis are valid instruments commonly used to address research problems in tourism and the wider social sciences. Reliability is intimately associated with replicability and transparency, and it is my belief that the procedures and the mixed methods discussed in this chapter represent a reliable and effective means of addressing the research aims. The methods used have been described sufficiently transparently to afford possible replication.

## **CHAPTER FIVE**

### **5 THE ECOLOGICAL ATTITUDES OF VISITORS TO DUMFRIES & GALLOWAY: CAN RURAL VISITORS BE DIFFERENTIATED BY ECOLOGICAL ORIENTATION?**

#### **5.1 Introduction**

This chapter investigates the ecological orientation of visitors to Dumfries & Galloway. In the introduction to this thesis it was noted that this investigation stems from two main observations:

- Environmental awareness among consumers appears to be rising, yet there is little evidence to suggest that tourists/visitors to rural areas mimic this trend;
- Regional tourism stakeholders aim to position the region as an environmentally friendly or ecotourism destination.

This research can be considered a search for the ecologically concerned visitor, the type of visitor who might respond to the region becoming an environmentally friendly or ecotourism destination. By taking a sample of visitors to the rural region of Dumfries & Galloway and determining their ecological attitudes using the New Ecological Paradigm scale, this research compares and contrasts their responses over a number of different characteristics. The research investigates the concept of ecotourism, determining whether visitors consider themselves to be ecotourists, and if so, whether they hold stronger pro-ecological attitudes than other visitors.

Importantly, since attitudes are a precursor to behaviour (Lee and Moscardo, 2005), determining ecological attitudes provide, at the very least, an indication of the potential for people to act in an environmentally considerate way (Duffy, 2002). Establishing the ecological attitudes of visitors is therefore important in a rural region such as Dumfries & Galloway where the 'natural' heritage is a key component of the tourism product and the identity of the region.

This chapter begins by providing a statement on the reliability and dimensionality of the New Ecological Paradigm scale used in this research, described henceforth as the NEP. The full statistical analysis of the reliability and dimensionality of the scale can be found in Appendix B.

## **5.2 Reliability and dimensions of the New Ecological Paradigm (NEP)**

It is normal for studies using the NEP to begin with a report on the reliability of the scale (Dunlap *et al.*, 2000; Lück, 2003). A high level of internal consistency, or reliability, is considered an essential prerequisite for combining a set of items into a single measure such as the NEP (Dunlap *et al.*, 2000; Gliner and Morgan, 2000). In this context, a reliable scale is one that would produce the same results when undertaken repeatedly under exactly the same circumstances (Lück, 2003). In studies using the NEP reliability is often expressed using a statistical procedure called 'Cronbach's Alpha'. Luckily, Cronbach's Alpha can be calculated using statistical software such as SPSS, which was used in this research. The important thing to note is that Cronbach's Alpha ranges from 0, indicating a completely unreliable test with totally random scores, to 1 for a completely reliable test (Lück, 2003). A value of 0.7 is considered 'acceptable' in most social science research situations (Allen and Yen, 2002). When applied in this study, Cronbach's Alpha was 0.77 which indicates a relatively high level of reliability and provides justification for using the NEP (Lück, 2003). As explained fully in Appendix B, in order to achieve this level of reliability one of the fifteen items that make up the NEP was omitted.

Having found the NEP to be reliable in this research, it is also important to determine whether the NEP scale measures a single ecological attitude or a number of different ecological attitudes relating to specific facets. This is called the scale's 'dimensionality'. This is important because it affects the way the results are compared and contrasted. For example, if the NEP scale is found to measure a single ecological attitude then visitor responses to the scale can be summated, compared and contrasted with reference to a single score. On the other hand, if the NEP is found to be multi-dimensional then it may be appropriate to create sub-scales for each of the dimensions which emerge, and then summate, compare and contrast

visitor responses on each of these scores. As discussed in the literature review, few studies have made use of the revised NEP scale and therefore there is little evidence to support or reject the scale developer's claim that the new NEP is one-dimensional (Dunlap *et al.*, 2000). Studies using the older New Environmental Paradigm have reported that the scale measures several dimensions (Albrecht *et al.*, 1982; Geller and Lasley, 1985; Uysal *et al.*, 1994) conflicting with the scale developer's single dimension claims (Dunlap and Van Liere, 1978b).

The way in which one goes about determining if the NEP scale is one-dimensional or multi-dimensional is to conduct 'Factor Analysis' on the visitor responses to the scale. Factor Analysis attempts to identify underlying dimensions, or factors, that explain the pattern of correlations within a set of observed variables (Pearce, 2005). It is used in data reduction to identify a small number of factors that explain most of the variance observed in a much larger number of manifest variables.

Before the results of Factor Analysis are briefly discussed, it is important to report that the 107 visitors who provided data in this analysis represent a satisfactory sample size. The method used to determine this is the Keyser-Mayer-Olkin (KMO) measurement, a statistical test calculated through SPSS. This measurement ranges from 0 for an unsatisfactory sample size to use in Factor Analysis to 1 which indicates a good basis on which to proceed with Factor Analysis. Field (2000) reports that the value of KMO should be greater than 0.5 if the sample is adequate, and in this study the KMO value was 0.71.

In this research, the Factor Analysis revealed four factors or dimensions that explain 58% of variance. A more detailed examination and discussion is found in Appendix B. While this result initially appears to contradict Dunlap *et al.*'s (2000) single dimension claim, these analysts also revealed four dimensions. However, their justification for treating the new NEP as a single measure of ecological attitude is based on the finding that the first factor to emerge, which explained the most variance, includes most of the NEP items. Furthermore these analysts note the presence of significant 'cross loadings', which means that high values emerging in one factor are also found in one or more of the other factors. Based on this evidence, which they concede is open to varying interpretations, Dunlap *et al.* (2000) justify

using the new NEP as measuring a single construct and reject the need to create NEP sub-scales.

The situation with the sample in this thesis is different (Table 5.1). Although the same number of factors emerged (four), the first factor to emerge, which explains 16.1% of the variance, has only four NEP items loading on it including two items relating to ‘limits to growth’, one ‘possibility of an eco-crisis’ and one ‘balance of nature’. There are no items relating to ‘anti-exemptionalism’ or ‘anti-anthropocentrism’ loading on this first factor or any cross-loadings. Furthermore the other three factors to emerge explain similar amounts of variance therefore indicating the presence of four distinct NEP subscales. In other words this study finds the new NEP to be multi-dimensional. This is not a flaw in any way nor does it suggest that the NEP is not a valid instrument for measuring ecological attitudes. This finding is, however, important showing that it can not be taken for granted that the revised NEP scale measures one dimension and will add to the existing literature addressing issues of dimensionality and the NEP (Lück, 2003). The main conclusion to be drawn from these findings is that this study should not just rely on the overall summated mean NEP scores of visitors but should also create NEP sub-scales of the four factors to emerge and test visitors across these as well.

**Table 5.1 Factor Analysis of NEP items in the present study**

NEP item	NEP Facet	Emerging Factors				
		1	2	3	4	
1	Limits to growth	0.79				Limits to growth
15	Possibility of an eco-crisis	0.72				
11	Limits to growth	0.71				
13	Balance of nature	0.52				Anti-exemptionalism
14	Anti-exemptionalism		0.70			
10	Possibility of an eco-crisis		0.69			
4	Anti-exemptionalism		0.68			Balance of nature
3	Balance of nature			0.72		
7	Anti-anthropocentrism			0.68		
9	Anti-exemptionalism			0.66		Anti-anthropocentrism
5	Possibility of an eco-crisis			0.57		
2	Anti-anthropocentrism				0.73	
12	Anti-anthropocentrism				0.58	
8	Balance of nature				0.57	
Eigenvalue		2.2	2.0	2.0	1.8	
Percentage of variance		16.1	14.5	14.4	12.7	

The first task is therefore to name each of the factors which emerged, before revealing, comparing and contrasting the ecological attitudes of visitors to Dumfries & Galloway. A simple way of naming the NEP sub-scales is to adopt the name of the facet with the highest loading value on each factor to emerge or the name of the facet that has most presence in each emergent factor. Using this method, sub-scale 1 will be termed 'limits to growth', sub-scale 2 is named 'anti-exemptionalism', sub-scale 3 is called 'the fragility of nature's balance' and the final sub-scale is 'anti-anthropocentrism'. It is important to note that the facet representing items concerned with the 'possibility of an eco-crisis' are present within sub-scales 1, 2 and 3 and therefore is measured by these sub-scales. Had two or more items measuring the 'possibility of an eco-crisis' emerged in a factor, then it would have merited a dedicated sub-scale. However this is not the case.

To summarise, the preceding results in this chapter use both the overall mean NEP responses and responses to the four sub-scales in order to evaluate, compare and contrast the ecological attitudes of visitors to Dumfries & Galloway.

### **5.3 Visitor response to the New Ecological Paradigm scale**

Table 5.2 below displays visitor responses to the NEP scale. The mean values listed indicate the strength of ecological orientation towards each of the question items with a score of 1 signifying a weak environmental orientation and 5 suggesting a pro-ecological or pro-environmental orientation. What is apparent from these results is that all mean values are greater than the neutral value of three (with the exception of NEP6) indicating that visitors to Dumfries & Galloway have a pro-environmental orientation. The overall grand mean, which excludes NEP 6 for reasons stated earlier, is 3.9. This is lower than the ecotourists in the Higham *et al.* (2001) study which was 4.2, but slightly higher than the 3.79 recorded among sheep farmers in Norway (Kaltenborn *et al.*, 1998). Within these broad observations it should be appreciated that different types of visitors may have different ecological orientations and this is investigated and reported in a later section.

The responses to the NEP scale show there are varying degrees of support for some of the question items (Table 5.2). For example, it would appear that visitors to Dumfries & Galloway are most concerned about the fragility of nature's balance (3, 8, 13) and reject the notion that the human species is at nature's centre and nature exists to meet human needs (2, 7, 12). In contrast, two questions associated with the facet of anti-exemptionalism (4, 14) show the weakest support with mean values just over 3. A significant proportion of visitors provided a neutral response to NEP 4, thus indicating that this question was either particularly difficult to understand or respondents had no firm view on this statement. The question which received the greatest support was NEP 7, one of the facets of anti-anthropocentrism, with almost three-quarters of all visitors surveyed strongly agreeing that plants and animals have as much right as humans to exist.

**Table 5.2 Responses to the New Ecological Paradigm (NEP) scale (Number of respondents = 107)**

Facets	Do you agree or disagree <sup>a</sup> that:	SA <sup>b</sup>	MA	U	MD	SD	Mean <sup>c</sup>
(Limits)	1. We are approaching the limit of the number of people the earth can support	25.2	29.0	27.1	11.2	7.5	3.53
(Anti-anthro)	2. Humans have the right to modify the natural environment to suit their needs	0.9	20.6	13.1	23.4	42.1	3.85
(Balance)	3. When humans interfere with nature it often produces disastrous consequences	54.2	27.1	9.3	2.8	6.5	4.20
(Anti-exempt)	4. Human ingenuity will insure that we do NOT make the earth unliveable	9.3	23.4	35.5	15.0	16.8	3.07
(Eco-crisis)	5. Humans are severely abusing the environment	57.0	31.8	1.9	4.7	4.7	4.32
(Limits)	6. The earth has plenty of natural resources if we just learn how to develop them	25.2	41.1	10.3	11.2	12.1	2.44
(Anti-anthro)	7. Plants and animals have as much right as humans to exist	74.8	15.0	4.7	1.9	3.7	4.55
(Balance)	8. The balance of nature is strong enough to cope with the impacts of modern industrial nations	1.9	8.4	17.8	29.0	43.0	4.03
(Anti-exempt)	9. Despite our special abilities humans are still subject to the laws of nature	54.2	37.4	6.5	0.0	1.9	4.42
(Eco-crisis)	10. The so-called "ecological crisis" facing humankind has been greatly exaggerated	1.9	14.0	21.5	23.4	39.3	3.84
(Limits)	11. The earth is like a spaceship with very limited room and resources	30.8	31.8	18.7	15.0	3.7	3.71
(Anti-anthro)	12. Humans were meant to rule over the rest of nature	2.8	7.5	14.0	19.6	56.1	4.19
(Balance)	13. The balance of nature is very delicate and easily upset	50.5	37.4	9.3	1.9	0.9	4.35
(Anti-exempt)	14. Humans will eventually learn enough about how nature works to be able to control it	3.7	20.6	31.8	22.4	21.5	3.37
(Eco-crisis)	15. If things continue on their present course, we will soon experience a major ecological catastrophe	39.3	25.2	15.9	11.2	8.4	3.76

<sup>a</sup> Question wording in the self-administered questionnaire: "Listed below are statements about the relationship between humans and the environment. For each one, please indicate whether you STRONGLY AGREE, MILDLY AGREE, MILDLY DISAGREE, or UNSURE, MILDLY DISAGREE or STRONGLY DISAGREE with it".

<sup>b</sup> SA = Strongly agree, MA = Mildly agree, U = Unsure, MD = Mildly disagree, SA = Strongly disagree. Agreement with the eight odd-numbered items and disagreement with the seven even-numbered items indicate pro-NEP responses. Responses are given in percent.

<sup>c</sup> The mean values reported take into account the even-numbered items, which have been reverse coded so that a high mean value (5) indicates a pro-environmental orientation.



Reviewing the mean values for each of the four NEP sub-scales (Table 5.3) confirms that visitors to Dumfries & Galloway show the greatest concern for the fragility of nature's balance. This has received considerable mainstream media attention in recent years especially in relation to climate change and therefore may have heightened concern among visitors.<sup>36</sup> Also of note is the prevalence of attitudes regarding anti-anthropocentrism. This facet addresses beliefs that are associated with the idea of 'deep ecology' which in the words of Naess (1973: 100) requires "an awareness of equal right (of all things) to live and blossom". Visitors to the region appear to be least concerned with rejecting exemptionalism, or the idea that humans are above nature (Corral-Verdugo, 2002) and the reality of limits to growth, although both these facets are still supported.

**Table 5.3 Mean values of visitors across the four facets of the New Ecological Paradigm**

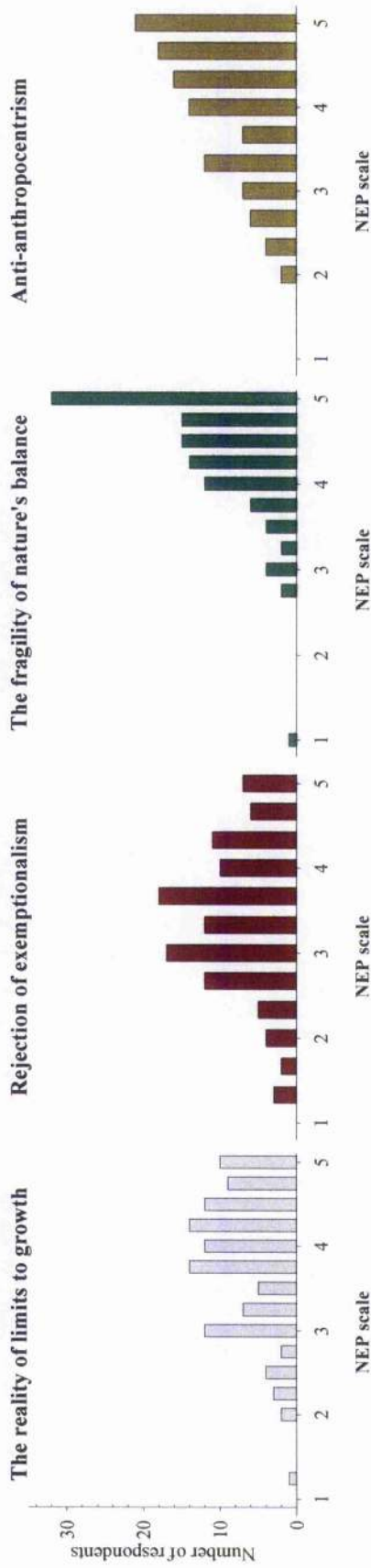
	<b>Emergent factors</b>	<b>Mean NEP</b>	<b>SD</b>
Subscale 3	The fragility of nature's balance	4.37	0.68
Subscale 4	Anti-anthropocentrism	4.02	0.83
Subscale 1	Limits to growth	3.84	0.82
Subscale 2	Rejection of exemptionalism	3.43	0.89

The mean values of the anti-anthropocentrism facet and the fragility of nature's balance facet are statistically different from the other facets (one sample t-test,  $p < 0.05$ ) thus indicating that these are the most important facets to visitors in Dumfries & Galloway. The distribution of mean scores for these four subscales is shown in Figure 5.1. These graphs show the presence of some anthropocentric attitudes with regards to 'the reality of limits to growth' and 'rejection of exemptionalism' but more pro-ecological attitudes with respect to 'anti-anthropocentrism' and 'the fragility of nature's balance' in particular.

<sup>36</sup> Recent TV programmes have included "Are We Changing Planet Earth?" (BBC 1, 24 May 2006); "Paying the price of travel" (ITV, Tonight With Trevor McDonald, 24 March 2006).

**Figure 5.1** Distribution of mean scores across the four facets to arise from the factor analysis

(Sample N = 107)



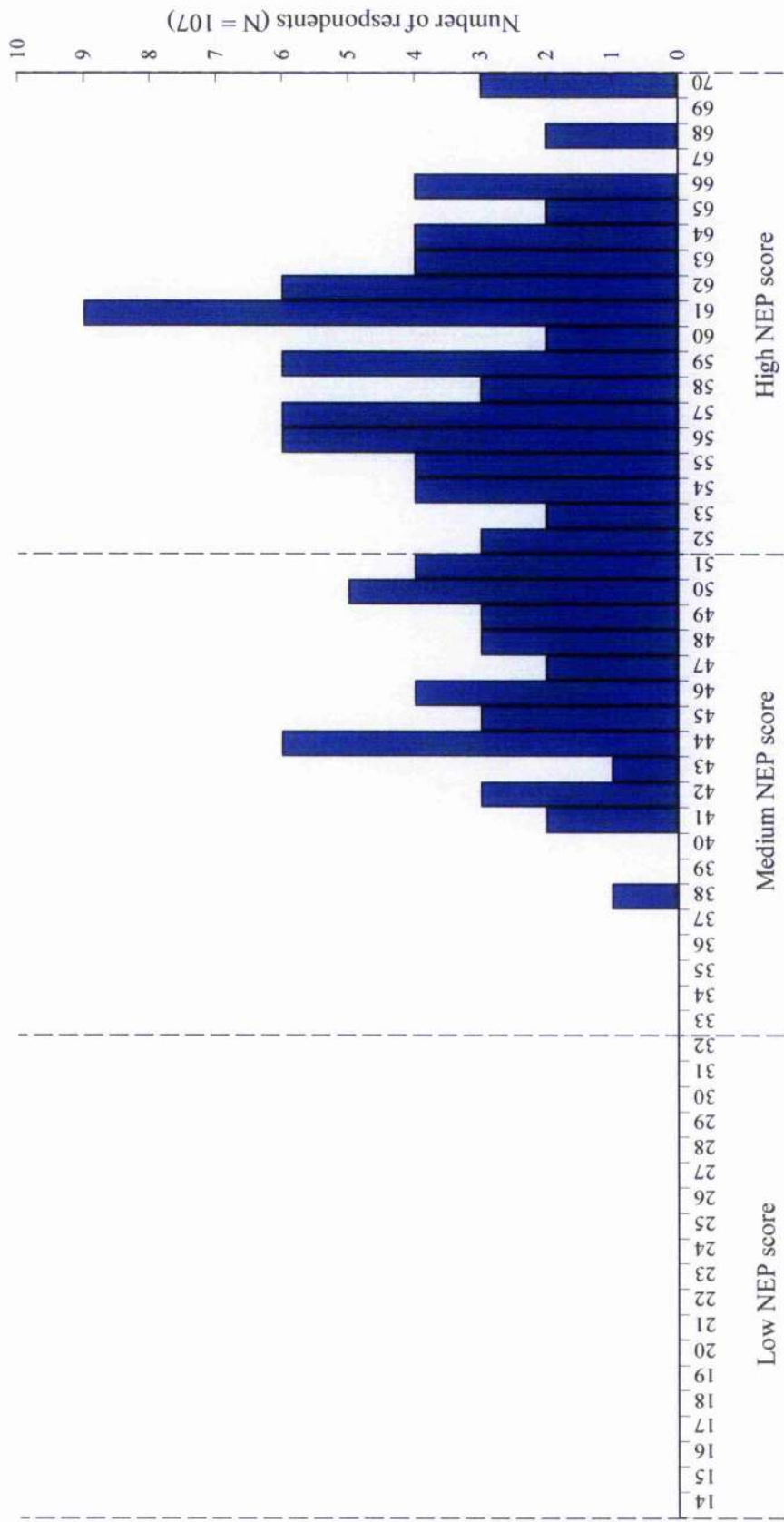
The NEP scale (x-axis) ranges from one to five representing the Likert-scale. The highly skewed distributions addressing 'the fragility of nature's balance' and 'anti-anthropocentrism' demonstrate higher concern for these facets.

While these results provide us with an indication of the overall pro-ecological orientation and the facets of most concern to visitors to Dumfries & Galloway the mean values disguise the variation of individual scores. It is therefore beneficial to examine the distribution of scores along an axis of possible scores (Figure 5.2 below). Where all 15 items of the NEP are used scores can range from a low of 15 indicating a dominant anthropocentric worldview to 75 suggesting a dominant ecocentric worldview. However, since NEP 6 was dropped from the model due to its negative impact on the reliability of the scale the possible range goes from 14 to 70.

What is immediately evident from Figure 5.2 is that none of the 107 visitors surveyed in Dumfries & Galloway recorded what could be considered low NEP scores. In fact almost two-thirds of all survey participants recorded NEP scores of 52 and over suggesting that most visitors have pro-ecological orientations. The overall mean score is 55.2 however the most frequent score (8.4% of respondents) was even higher at 61. In comparison, Floyd et al's (1997) study of visitors to two national parks in the United States reveals that 25% of their sample recorded NEP scores below 45. Therefore it would appear that visitors to Dumfries & Galloway have higher pro-ecological attitudes in comparison to visitors to national parks in the United States. It has been reported that Americans tend to have lower environmental values than German, Dutch and Scandinavian residents (Lütk, 2003); however without data for UK residents one can not be sure that this finding is typical or not. Perhaps the large areas of wilderness in the USA lead to a feeling of limitless environmental resources and therefore less ecological concern?

Figure 5.2 imparts consoling news for host destination managers since the majority of visitors have high pro-ecological attitudes and therefore at the very least have the aptitude to behave in an environmentally responsible manner. Whether or not this high endorsement of an ecological paradigm transfers into pro-environmental action is another matter and is assessed later.

Figure 5.2 Distribution of visitor scores across all potential NEP scores



Having presented and discussed the general responses of visitors to the New Ecological Paradigm scale the next section aims to test NEP scores against demographic characteristics in order to highlight any significant differences in pro-ecological attitudes.

#### **5.4 Are there any differences in the environmental orientation of visitors to Dumfries & Galloway with different demographic characteristics?**

Previous tourism studies using the NEP scale found that most demographic characteristics did not have an influence on environmental attitudes (Lück, 2000; Uysal *et al.*, 1994). This sub-section sets out to establish if this is also the case in a different location and with a different sample population. This information is useful for a number of reasons. Firstly, it adds to the existing literature on the environmental/ecological orientation of rural tourists of which there are few studies. Secondly, identifying or segmenting types of visitors based on their demographic characteristics and ecological orientations can have practical relevance in the marketing of a region. It may help to identify the characteristics of visitors with the highest pro-environmental attitudes and therefore those most likely to respond to the development of the region as an environmentally friendly tourism destination.

It is perhaps appropriate to start this section by considering the country of permanent residence of visitors to Dumfries & Galloway (Table 5.4). Studies have revealed differences in the environmental orientation of tourists from different countries. Lück (2000), for example, found that German visitors to New Zealand had greater endorsement of the NEP in comparison to American visitors. Asian visitors were found to have the lowest endorsement of the NEP although differences between the separate nationalities were reported as slight. By determining the ecological attitudes of visitors from different countries one can create a general picture of how different nationalities might behave while in the study region. Again the practical outcome of this analysis may help to target marketing to those specific countries with ecocentric residents who may be attracted to Dumfries & Galloway as an ecotourism or environmentally friendly tourism destination. In the sample of 107 visitors to Dumfries & Galloway only 4.7% (five visitors) were from outside the UK, which is

similar in proportion to official statistics for Dumfries & Galloway (VisitScotland, 2004a), but means that generalising about mean NEP values based on such a small sample should be treated with some caution.

**Table 5.4 Country of origin and comparison of mean NEP scores**

	N	Mean NEP	SD	<i>One way ANOVA</i>		
				<i>F</i>	<i>df</i>	<i>p</i>
Scotland	29	3.83	0.62	1.091	8	0.376
England	69	4.01	0.53			
Wales	2	4.39	0.25			
Northern Ireland	2	3.86	0.30			
Germany	1	3.71	-			
Denmark	1	3.21	-			
Switzerland	1	4.00	-			
Netherlands	1	2.93	-			
New Zealand	1	3.79	-			
Total	107	3.94	0.55			

Although the sample of visitors from overseas, Wales and Northern Ireland is small the results indicate that there is no significant difference in pro-ecological orientation. Each of the four factors that emerged from the factor analysis were also tested against the country of visitor origin and no statistically significant differences were evident.<sup>37</sup> While the results demonstrate that the Welsh visitors have the greatest endorsement of the NEP only two visitors were tested. The most reliable figures from this table are those for Scottish and English visitors. It would appear that English residents have greater ecocentric views than Scottish residents although differences are not significant. Since English residents form the greatest proportion of all visitors to Dumfries & Galloway it is satisfying to note their high pro-ecological attitudes.

Country of residence seems to provide no significant differences in the ecological orientations of visitors and nor does trip type. Trip type is used to refer to whether visitors came to the region for a holiday, day trip, to visit friends or relatives, for

<sup>37</sup> One-Way ANOVA: Limits to growth ( $F = 1.250$ ,  $df=8$ ,  $p = 0.278$ ); Anti-anthropocentrism ( $F = 1.273$ ,  $df=8$ ,  $p = 0.267$ ); The fragility of nature's balance ( $F = 0.687$ ,  $df=8$ ,  $p = 0.702$ ); Rejection of exceptionalism ( $F = 1.545$ ,  $df=8$ ,  $p = 0.152$ ).

business or any other reasons. The greatest number of participants were in the region for a holiday (72) and these tourists recorded the second greatest pro-ecological attitudes (mean NEP = 3.94) after those visiting friends or relatives (8 participants) (mean NEP = 4.09). Day trippers (23) recorded a slightly lower NEP score than the holidaymakers, but the lowest NEP score was held by one respondent who was in the region for 'other' purposes (mean NEP = 3.64). Business visitors, of which there were only three groups, recorded a mean NEP score of 3.74 which is below average. No statically significant differences were found when testing trip type against overall mean NEP score or when tested against the four individual facets.

Although no significant differences were found in terms of ecological orientation and trip type, those visiting friends and relatives held the highest pro-ecological attitudes (mean = 4.09). Again this is welcome news for stakeholders promoting sustainable development of rural tourism in Dumfries & Galloway since those visiting friends and relatives (VFRs) are the second most numerous type of tourist the region receives (VisitScotland, 2004a). Holidaymakers are the most numerous type of tourist and they also held strong pro-ecological views, although the most frequent type of visitor are day-trippers (21 million trips in 2002/03) who recorded a below average, but still positive, NEP score. Although some research indicates that a day trip to the countryside in the UK usually involves a round trip of 41 miles (The Countryside Agency *et al.*, 2004) some of the interviewees travelled significantly longer distances to visit Dumfries & Galloway. For example, one couple from Preston in Lancashire (North West England) endured a 240 mile round trip to visit Caerlaverock National Nature Reserve and another interviewee participant travelled from Glenrothes in Fife (260 mile round trip). He was also visiting Caerlaverock. While this demonstrates the significant pulling power of this particular nature-focused attraction it also indicates that some day-trippers will create six times as much CO<sub>2</sub> as the average day-tripper (average day tripper = 41 miles round trip = 15 kg CO<sub>2</sub>).<sup>38</sup> Therefore despite having pro-ecological views, day-trippers can have a significant impact on the environment. Other visitors also use private cars to get to and travel around the region. Indeed, 96.3% of questionnaire respondents used a hired or private car to get to Dumfries & Galloway. Clearly this is an extremely high

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<sup>38</sup> [www.nef.org.uk/energyadvice/co2calculator.htm](http://www.nef.org.uk/energyadvice/co2calculator.htm)

proportion and represents a significant challenge to the development of the region as an environmentally friendly destination. Part of this high private transport usage can be attributed to the poor public transport links throughout the region, the remoteness of some attractions and the flexibility that a car gives. Some interviewees, who had used private transport to reach the region, recognised that using personal transport was not the most environmentally friendly way of getting to a destination but noted few alternatives. One interviewee from Yorkshire summed up the problem:

“I’ve used my car to get here and that’s not particularly environmentally friendly and the problem with this area is that you can’t actually get here using public transport, even if you use buses – they don’t go where you want to go. It needs more train services I would think”

This study also compared the ecological orientations of visitors and party composition (who visitors were travelling with) in order to determine if different party compositions result in different pro-ecological attitudes. Most visitors sampled were travelling with their family/friends (49 groups) and these visitors recorded a below sample average NEP score of 3.93 although the difference in mean NEP values across all different types of groups is not statistically significant. A similar proportion of sampled groups represented those travelling with a partner (48 couples). This segment displayed the highest pro-ecological views with an above average overall NEP score of 3.98. Given that VisitScotland Dumfries & Galloway view the couples segment as a key market, as evidenced through official tourism literature (see Plate 5.1), it would appear that VisitScotland are unwittingly attracting those visitors displaying the greatest pro-ecological attitudes.

The lowest NEP scores were expressed by those travelling alone (mean NEP = 3.81). This segment of the sample represented only ten people. Analysis of party composition across the four sub-scales to emerge also revealed no statistically significant differences.





(Source: (a) Front cover of the 2004 *where to stay* brochure. (b) Page 7 of the 2004 *where to stay* brochure. (c) Page 32 of the 2004 *see & do* brochure.)

**Plate 5.1 Images of couples dominate the 2004 promotional brochures published by VisitScotland Dumfries & Galloway**

Another demographic variable tested for differences in environmental orientation is gender. Some studies have stated that no firm conclusions can be drawn about the effects of gender on concern about general environmental issues (Hines *et al.*, 1987; Mohai, 1992; Van Liere and Dunlap, 1980b), whilst other research has noted that females expressed significantly higher NEP environmental attitudes than males (Arcury, 1990; Blaikie, 1992). Attitudes are mirrored by behaviour in that the majority of studies show that females tend to participate more in pro-environmental behaviour than males (Zelezny *et al.*, 2000). One popular theory for explaining these differences is socialisation theory which suggests that “Females across cultures are socialised to be more expressive, to have a stronger ‘ethic of care’, and to be more

interdependent, compassionate, nurturing, cooperative, and helpful in care-giving roles” (Zelczyny *et al.*, 2000: 445). While this theory might be illuminating in explaining some gender differences with regards to environmental orientation, in terms of gender and tourism in Dumfries & Galloway, most visitors travel with their partner or with their family which could, in theory, counter-balance any positive caring roles towards the environment that females are thought to have. This research shows that over half of visitors in the sample were female (60%) and these participants express higher pro-ecological opinions (mean NEP = 3.99) than males (3.86). However the differences in mean NEP score, and across the four sub-scales, were not statistically significant. This finding therefore suggests that both genders appear to have statistically similar ecological attitudes.

A statistically significant difference was however found between pro-ecological orientation and age characteristics of visitors to Dumfries & Galloway (Table 5.5). Previous research has found age to be a consistent predictor of environmental concern with younger people more environmentally concerned than older people (Buttel, 1979; Van Liere and Dunlap, 1980a). However, the findings below show the reverse in that older visitors to the region express the highest pro-ecological attitudes and the younger cohort expressed the least pro-ecological attitudes.<sup>39</sup> This suggests that as one gets older the more likely one is to be concerned, or at least aware of environmental issues.

**Table 5.5** Visitor age and mean NEP score

Age	N	Mean NEP	SD	One way ANOVA		
				F	df	p
<30	10	3.51	0.53	2.703	3	0.04
30 - 39	7	3.87	0.56			
40 - 54	36	3.94	0.54			
>55	54	4.03	0.54			
Total	107	3.94	0.55			

<sup>39</sup> A statistically significant positive correlation was found between age and mean NEP score when tested using Spearman's rho (Correlation Coefficient = 0.203). Spearman's rho is a rank-order correlation coefficient which measures association at the ordinal level. This is a nonparametric version of the Pearson correlation based on the ranks of the data rather than the actual values.

This reversal from the norm may be partly due to the low number of visitors under 40 years old. Increasing the sample size of younger visitors could potentially increase the mean NEP score. However another possible explanation for this finding might come from contemplating the epoch in which these visitors were born and brought up. This is sometimes called the 'cohort effect' (Buttel, 1979) where people of an analogous age that have experienced similar historical and economic conditions have the same pattern of attitudes toward certain issues and a different reaction than respondents of another age-cohort with different social and economic experiences. Visitors who are around 55 years old would have been teenagers or in their early twenties during the environmental movement of the 1960s and this may have had a lasting influence on their environmental attitudes. In addition, older visitors have had longer exposure to environmental problems and may have witnessed some significant changes locally and globally in their lifetime. Merging seasons, increased frequency of flooding, increased road congestion and global ice-cap melting may have influenced their environmental orientation.

The age findings above again provide good news for Dumfries & Galloway tourism. Official statistics inform us that 54% of all visitors to Dumfries & Galloway are over 45 years old (VisitScotland, 2003) and it is these visitors who demonstrate the highest pro-ecological attitudes.

Some research has reported a correlation between pro-environmental attitudes and level of education: those with higher qualifications express higher concern for the environment (Van Liere and Dunlap, 1980a). In the sample of visitors to Dumfries & Galloway no significant correlation or difference in mean NEP values was found between these variables, however it was interesting to find that visitors with vocational or trade qualifications expressed the highest pro-ecological attitudes and those with no formal qualifications expressed the least pro-ecological views.<sup>40</sup> It should be noted that only two people in the sample had vocational or trade qualifications and when these cases were omitted from the analysis the differences were still insignificant. There was however a statistical difference between the

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<sup>40</sup> One-Way ANOVA: educational qualifications and mean NEP score; no qualifications (N = 22, mean NEP = 3.83); high-school qualifications (N = 22, mean NEP = 3.82); vocational/trade qualifications (N = 2, mean NEP = 4.25); degree/diploma (N = 45, mean NEP = 3.99); postgraduate degree (N = 16, mean NEP = 4.10) (F = 1.056, df=4, p = 0.382).

rejection of exemptionalism facet and education. Statistical testing revealed that those with postgraduate degrees (15% of the sample) held stronger pro-ecological views than visitors with no qualifications with regards to rejection of exemptionalism.<sup>41</sup> This could suggest that more educated visitors strongly acknowledge the limitations of humans to control and master nature or perhaps they just understood the questions relating to this facet better.

To summarise, this section has presented findings assessing the ecological orientation of visitors and demographic profiles. The research has shown that there are no statistically significant differences between overall mean NEP scores and visitor origin, trip type, party composition, gender and level of education. There was a significant difference in the age of the respondent and overall mean NEP score however contrary to findings elsewhere it is suggested that older visitors to Dumfries & Galloway express higher pro-ecological attitudes than younger visitors. Another statistically significant difference has also been revealed in relation to education and the rejection of exemptionalism.

Despite finding little evidence to suggest that demographics play an important role in ecological attitudes, and therefore confirming findings from other studies in different locations (Lück, 2000; Uysal *et al.*, 1994), one can still construct a picture of visitors who express the greatest pro-ecological attitudes which may be useful for marketing or promotion. Discounting Welsh visitors, based on only two questionnaire participants, visitors with the most pro-ecological views were from England, were over 55 and female. These visitors tend to be in the region with their partner or family/friends with the purpose of visiting friends or relatives.

### **5.5 Are there any differences in the environmental orientation of visitors to Dumfries & Galloway in relation to accommodation choice?**

Having assessed demographic influences the findings now turn to the type of accommodation used by visitors. Identifying the types of accommodation which

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<sup>41</sup> One-Way ANOVA test revealed a significant difference between age and the rejection of exemptionalism facet ( $F = 2.720$ ,  $df=4$ ,  $p = 0.034$ ). The Tukey HSD procedure (Post Hoc test) revealed that visitors with a postgraduate degree differed from those with no qualification ( $p = 0.049$ ).

visitors use and determining whether ecological attitudes of respective users differ may well be useful as a guide for establishing which forms of accommodation are most likely to be used by those with high pro-ecological attitudes. Inclusion in one of the tourism industry's environmental schemes for accommodation may pay dividends for accommodation providers if it can be shown that customers are concerned about environmental matters. Kaae (2001) found that tourists staying in boats and those camping were less interested in sustaining the ecological diversity of flora and fauna in comparison to those using other forms of accommodation, although he offers no explanation of why this might be the case. Visitors conveying higher pro-environmental attitudes tended to rent holiday homes. Although Kaae (2001) did not use the NEP scale in measuring environmental orientation his research addressed attitudes towards sustainable tourism principles which is more akin to a pro-ecological philosophy as opposed to an anthropocentric worldview. However, it is recognised that accommodation choice is likely to be influenced by numerous other factors such as cost, availability, visitor needs and location, and is unlikely to be exclusively based on the environmental performance of the accommodation provider.

Before we assess whether pro-ecological visitors can be identified from their choice of accommodation it is worthwhile establishing the environmental credentials of the accommodation providers, an issue which is discussed more fully in Chapter Six. It is important to determine if there are certain types of accommodation that are managed in a pro-ecological or sustainable manner so that visitors have this choice.

There are a small number of tourism accommodation providers in the region who are members of the Green Tourism Business Scheme (13 businesses in total) and other environmental accreditation schemes (e.g. David Bellamy Conservation Awards – 10 caravan/campsite businesses in the region with this award) but not all these enterprises advertise their commitment to environmental management and reducing impacts. The type of accommodation with the greatest capacity in the region, caravan parks, also appears to be the most pro-ecological in their management as indicated by the David Bellamy awards. In terms of engagement in the GTBS there are more self-catering enterprises (4 in total) managing their business sustainably than any other type of accommodation although overall participation is low. Perhaps one reason

why many caravan parks and some self-catering enterprises have adopted environmental management practices is to gain competitive advantage and differentiate their product from the relatively large number of these forms of accommodation in the study region. On the other hand, business managers may simply have a pro-ecological approach to operating their business.

Given that the uptake of the Green Tourism Business Scheme (GTBS) is low amongst accommodation providers in the region it was surprising to find that almost 16% of all visitors had heard of the GTBS. A high percentage of questionnaire respondents (68%) said they would choose environmentally friendly accommodation over less sustainably managed lodgings, even if it was slightly more expensive, but were unsure of where they could find environmental information about accommodation providers. In order to generate interest from these visitors it is clear that accommodation providers need to advertise their allegiance to environmental management or possibly join one of the accreditation schemes that promote environmentally managed accommodation.

Returning to ecological attitudes and accommodation choice, the results indicate that visitors utilising self-catering accommodation express the highest pro-ecological attitudes and those camping held the least pro-ecological views (Table 5.6). This is remarkably similar to Kaae's (2001) findings, although unlike his study there were no statistically significant differences in overall mean NEP scores or across the four sub-scales. The lower score for campers may be explained by firstly the country of origin of one camper (The Netherlands) who recorded a low total NEP score (41, see Figure 5.2 above), secondly most campers are male (67%) who also record lower than average total NEP scores, thirdly a high proportion of campers (83%) were not members of any environmental/conservation organisation which can be an indicator of pro-ecological commitment. By comparison users of self-catering accommodation tend to be female (71%) who express higher than average pro-ecological attitudes and are members of environmental/conservation organisations (71%). Age and education does not appear to be significant with regards to accommodation choice. Visitors staying in hotels and caravans or motorhomes expressed lower than average, but still pro-, ecological attitudes, although the differences are extremely small and again not statistically significant.

**Table 5.6 Accommodation used and mean NEP score**

Accommodation type	N	Mean NEP	SD	<i>One way ANOVA</i>		
				<i>F</i>	<i>df</i>	<i>p</i>
B&B	11	3.97	0.58	0.628	5	0.679
Hotel	11	3.90	0.50			
Camping	6	3.61	0.68			
Caravan/motorhome	30	3.90	0.51			
Self-catering	14	4.07	0.58			
Friends/relatives home	3	4.00	0.74			
Total	75	3.92	0.54			

This finding suggests that visitors staying in bed and breakfast accommodation, self-catering accommodation and in friends and relatives homes have above sample average NEP scores. These forms of accommodation could be considered to be more environmentally friendly than hotels which accommodate a large amount of people and can generally create greater volumes of waste and utilise more resources such as energy and water in comparison to private homes and self-catering units (Donovan and McElligott, 2000). As discussed in the literature review the concept of ecotourism is premised on a small-scale philosophy that extends to facilities such as accommodation. Given that visitors with the highest pro-ecological attitudes make most use of small-scale accommodation facilities, positioning the region as an ecotourism destination should mean an increase in the promotion of these types of accommodation.

It was suggested earlier that accommodation choice is likely to be influenced by a number of factors which, although not of central importance to this thesis, are interesting to note. Although there was no significant difference in relation to mean NEP scores, or within the sub-scales, value for money was found to be extremely important or important for 77% of visitors. Although visitors indicated that they could not find out about environmental credentials of accommodation providers, 71% still felt that it was extremely important or important that the accommodation was environmentally friendly. There was no statistically significant difference in the overall mean NEP scores between those who felt it was important that accommodation was environmentally friendly and those who indicated otherwise. A significant difference was however revealed within the sub-scale addressing anti-

anthropocentrism items of the NEP.<sup>42</sup> The analysis suggests that visitors who were least concerned about the environmental credentials of accommodation providers were the most anthropocentric, or human-centred, in their attitudes.

“I can’t say that a high environmental standard would rank particularly high when choosing a place to stay” (Visitors from Bedford)

“Depends on the cost of environmentally friendly accommodation. We usually look for B&Bs around £25 - £30. If it wasn’t too much more, if it was £3 or £4 perhaps we would take the one with a higher environmental standard. It depends what you get for that difference” (Visitors from Shropshire).

Another important factor when choosing accommodation is location. Some visitors may favour a location close to amenities while others may prefer a more isolated location away from the main holiday centres. A third of all respondents felt that an isolated location was extremely important or important but only one quarter felt that being close to amenities was either extremely important or important. This conceivably reflects the high usage of a car (93.3%) and the willingness to travel while in the host destination.

Another variable that could potentially impact on accommodation choice is the VisitScotland star grading system. Ranging from 1 to 5 stars the VisitScotland Quality Assurance scheme aims to provide a clear indication of “cleanliness, ambience, hospitality, service, accommodation standard and food”<sup>43</sup> VisitScotland are keen to promote this scheme amongst accommodation providers in order to standardise methods of assessing quality. However, at present not all accommodation providers are members of this scheme (which requires an annual membership fee). Interestingly only one third of respondents felt that the quality assurance scheme was important when choosing their accommodation despite the literature informing us

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<sup>42</sup> One-Way ANOVA: Importance of using environmentally friendly accommodation and anti-anthropocentrism ( $F = 2.330$ ,  $df=3$ ,  $p = 0.018$ ).

<sup>43</sup> [www.visitscotland.com/sitewide/star\\_grading](http://www.visitscotland.com/sitewide/star_grading)



that quality is a key issue for rural tourism (Roberts and Hall, 2001; Youell and Wornell, 2005).

To summarise this sub-section, it is evident that visitors to Dumfries & Galloway would use environmentally friendly accommodation if they could identify it. It is evident that there are no significant differences between the overall mean NEP scores of visitors and their choice of accommodation, however similarities were found with other research which suggests that visitors with greater pro-ecological attitudes are more likely to use self-catering/ holiday cottages. Perhaps this form of accommodation allows the visitor to have greater control over their purchases and the management of their waste. This is confirmed by cross-tabulating the types of accommodation used by visitors and levels of recycling revealing that those staying in self-catering accommodation tend to recycle more paper, bottles, aluminium cans and food in comparison to those staying in B&Bs and hotels.

#### **5.6 Do visitors differ in their ecological orientation depending on the activities they pursue?**

Visitors travel to places for a variety of different reasons. Among these reasons is the desire to pursue a specific activity or a range of different activities in a destination which is usually different in many respects from the normal place of residence (Urry, 2002).

It is the purpose of this section to discover the types of activities that visitors pursue and to determine whether there are any differences in visitor ecological orientation. This study embodies the search for nature-focused tourists or ecotourists - a segment consisting of visitors who are primarily motivated to travel in order to appreciate wildlife and natural elements of a host destination (Ceballos-Lascuráin, 1996; Fennell, 1999; Swarbrooke and Horner, 1999; Wearing and Neil, 1999). VisitScotland (2004b) suggest that 1.9 million trips, or 17% of all trips to Scotland, involved an element of nature engagement such as wildlife watching or nature study

as part of a wider holiday experience.<sup>44</sup> A smaller proportion of visitors (0.2 million trips, 2% of all holiday trips to Scotland) undertook a trip whose main purpose was nature study. Although some demographic information is available at the national level on these visitors (VisitScotland, 2004b) there has been no attempt to ascertain if nature-focused visitors differ from general rural visitors in terms of ecological orientation. Furthermore data on this segment are restricted to the national level and little is known about nature-focused visitors at the regional level. There is a danger that marketing the region as an ecotourism destination could impact negatively on the environment because of increased visitation to fragile sites, therefore it is important to determine if those with a particular interest in nature (i.e. those most likely to respond to ecotourism marketing) have stronger environmental attitudes than general visitors. If nature-focused visitors are found to have stronger pro-ecological attitudes then negative impacts are reduced.

Visitors were asked to stipulate if they had come to the region to pursue a particular activity, and 54.2% indicated they had, with a variety of interests being given. Some of these specific activities included visiting heritage sites, art galleries, on business, cycling, fishing, hill-walking, photography and golf. The most frequently cited specific activity was bird-watching (24 visitors) followed by visiting nature reserves (7 visitors). These 31 visitors, which represent 29% of the total sample, were therefore classified as nature-focused visitors on the basis that they had come to the region to specifically participate in a nature-focused activity. The likely reason for this relatively high proportion of nature-focused visitors in the sample is due to the locations from which the questionnaires were distributed, with three of five questionnaire sites being attractions with nature-focused elements (Caerlaverock, Mull of Galloway, and Grey Mare's Tail). However, it is not the purpose of the study to determine the market size of nature-focused tourists or ecotourists, but to compare their ecological orientation with other visitors to the region.

Species of particular appeal to nature-focused visitors include Spitsbergen barnacle geese, white fronted geese, whooper swans, passerines, various raptors such as peregrine falcons, red kites, golden eagles as well as woodland mammals such as red

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<sup>44</sup> VisitScotland (2004b) data for 2003.

deer, red squirrels and badgers. Other mammals of special interest to nature-focused visitors include otters and grey seals. The nationally rare natterjack toad (*Bufo calamita*), which has its northern range limit situated in Dumfries & Galloway, was also cited as a species of interest to nature-focused visitors. What seems apparent is that the region is particularly valued by nature-focused visitors for bird species and in particular the barnacle geese. While the most important bird habitats in the region have been commodified for the tourist gaze through the provision of visitor facilities such as bird hides and view points, opportunities still remain to develop more wildlife watching opportunities in relation to nationally threatened species such as red squirrels, albeit with careful management. The region is particularly fortunate in that it supports around one quarter of the Scottish red squirrel population.

Do nature-focused visitors to Dumfries & Galloway differ from other rural visitors in terms of ecological orientation? One might expect the answer to be yes since they have a specific interest in nature, and indeed this seems to be the case. The overall mean NEP score of nature-focused visitors was 4.19, higher than other visitors to the region (3.83). The difference between the two segments is statistically significant.<sup>45</sup> It emerges that nature-focused visitors to Dumfries & Galloway hold stronger pro-ecological attitudes than other rural visitors across all four NEP subscales, with all being statistically significant except fragility of nature's balance.<sup>46</sup> Both nature-focused and general rural visitors share similar high pro-ecological views with regards to the fragility of nature's balance. What these findings suggest is that visitors who come to the region for nature-focused activities are more likely to have high pro-ecological attitudes, however both these segments equally acknowledge that nature is delicate, easily upset and can be adversely affected by humans. Visitor activity would appear to be usable as an indicator of ecological orientation.

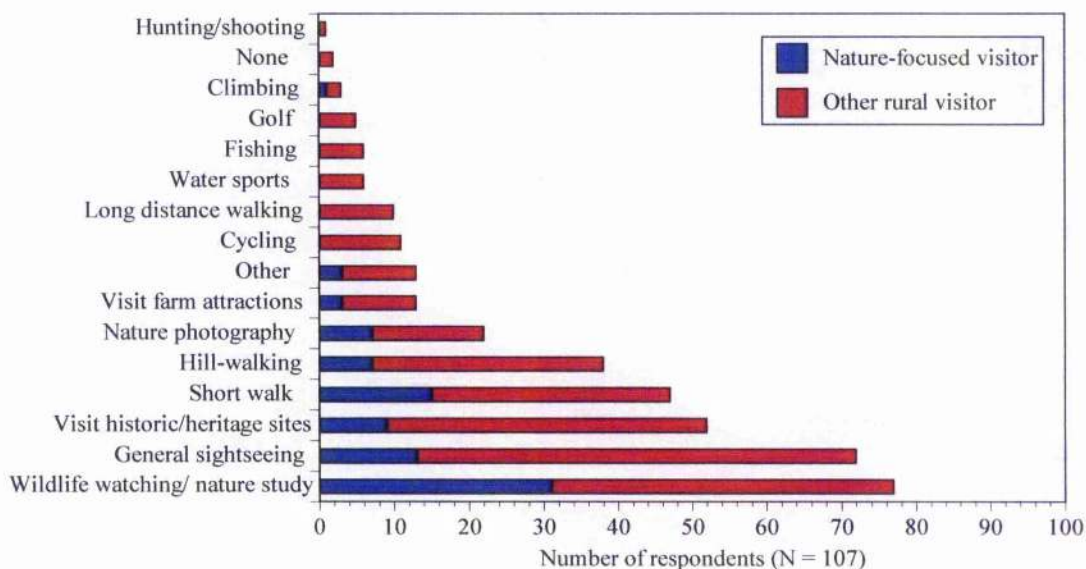
Visitors to the region engage in multiple pursuits as shown in Figure 5.3. From a checklist, participants were asked to indicate which activities they would engage in whilst in the region.

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<sup>45</sup> One-Way ANOVA: mean NEP score of nature-focused visitors and other rural visitors ( $F = 9.590$ ,  $df = 1$ ,  $p = 0.003$ ).

<sup>46</sup> One-Way ANOVA: mean NEP score of nature-focused visitors and other rural visitors; limits to growth ( $F = 2.777$ ,  $df=1$ ,  $p = 0.041$ ); anti-anthropocentrism ( $F = 5.511$ ,  $df=1$ ,  $p = 0.003$ ); rejection of exemptionalism ( $F = 13.422$ ,  $df=1$ ,  $p = 0.000$ ).

**Figure 5.3** Activities pursued by visitors to Dumfries & Galloway



Surprisingly the most frequently recorded activity was wildlife watching/nature study which of course comprises all the nature-focused visitors but also over 60% of general rural visitors. Therefore, as well as encompassing a specialist segment defined by a specific motivation to visit the region for nature purposes, it is apparent that wildlife watching/ nature study is also pursued by a large proportion of general rural visitors.

General sightseeing is the second most frequently pursued activity for all visitors and the most practised general rural visitor activity. Less than half the nature-focused visitors took part in general sightseeing reaffirming their more focused reason for visiting the region. There are other activities that nature specialists enjoy including taking short walks, perhaps to reach sites of nature interest. The most conspicuous finding from Figure 5.3 is that general rural visitors tend to take part in a greater number of activities in comparison to nature-focused visitors. Conceivably reflecting their pro-ecological orientation, the nature-focused visitors did not engage in consumptive nature-based activities such as fishing, hunting and shooting, or sports such as golf.

This research is also interested in establishing if there are any statistically significant differences in the ecological orientation of all visitors who pursued nature-based

activities compared to those did not (Table 5.7). It has been shown that visitors with a specific interest in nature have statistically significant higher pro-ecological attitudes from general rural visitors; however this also seems to be the case with all visitors pursuing this activity even if they have not been classified as a nature-focused visitor. This indicates that general rural visitors who engage in wildlife watching or nature study have a higher pro-ecological orientation and can also be segmented from those who do not pursue this activity. Further analysis using the sub-scales indicate that those taking part in wildlife watching/nature-study have significantly higher pro-ecological attitudes in relation to limits to growth, rejection of exemptionalism and the fragility of nature's balance, but express similar pro-ecological attitudes to those not taking part in this activity in relation to anti-anthropocentrism.

Table 5.7 shows no statistically significant difference in overall mean NEP score in relation to general sightseeing, however when scores are tested across the different sub-scales there is a difference. Those taking part in general sightseeing express lower pro-ecological attitudes than those who stated they do not take part in this activity in relation to rejection of exemptionalism but have similar attitudes with regards to the other NEP subscales. A similar situation is evident in relation to short walks where the overall mean NEP values are nearly but not quite statistically significant, but when tested over the sub-scales a statistically significant difference was revealed in relation to rejection of exemptionalism. However, this time those taking part in short walks expressed significantly higher pro-ecological attitudes than those who did not.

**Table 5.7 Comparison of mean NEP scores across different activities**

Activity	Mean NEP score (N)		ANOVA
	Not pursued	Pursued	<i>p</i>
Wildlife watching/ nature study	3.64 (30)	4.06 (77)	0.000*
General sightseeing	4.03 (35)	3.90 (72)	0.269
Visit historic/heritage sites	3.90 (55)	3.99 (52)	0.417
Short walk	3.85 (60)	4.06 (47)	0.057**
Hill-walking	3.91 (69)	4.01 (38)	0.375
Nature photography	3.88 (85)	4.17 (22)	0.033*
Visit farm attractions	3.94 (94)	3.94 (13)	0.991
Other activity	3.92 (94)	4.07 (13)	0.369
Cycling	3.94 (96)	3.98 (11)	0.806
Long distance walking	3.96 (97)	3.79 (10)	0.377
Water sports	3.93 (101)	4.05 (6)	0.631
Fishing	3.94 (101)	3.89 (6)	0.827
Golf	3.96 (102)	3.56 (5)	0.113
Climbing	3.94 (104)	4.12 (3)	0.576
Hunting/shooting	3.95 (106)	3.50 (1)	0.427

Average NEP = 3.94

\* Significant at the 95% confidence level

\*\* Significant at the 90% confidence level

The table above informs us that there is a statistically significant difference in overall mean NEP scores between those engaging with nature photography and those who do not. In fact the highest mean NEP score of all activities are found within this category. While moderate proportions of nature-focused visitors also pursued this activity, and have boosted the mean NEP score, there still remains a significant difference between those pursuing nature photography and those who do not. Based on this finding it is justified to suggest that visitors pursuing nature photography are likely to have greater pro-ecological attitudes than those who do not. Maybe this result is expected, since to photograph elements of nature, one is likely to have an interest in ensuring the subject matter (nature) is preserved for future enjoyment. The main statistically significant difference in attitudes between those pursuing and not pursuing nature photography is also found within the limits to growth sub-scale.

Although Table 5.7 shows that no other activities revealed differences in overall mean NEP scores, analysis using the sub-scales revealed one more significant difference in attitude. This was found in the anti-anthropocentrism sub-scale and is related to engaging in hunting/shooting. Although only one visitor indicated that they pursued this activity while in the region, and therefore one has to note extreme

caution with regards to the statistical analysis, it was interesting to find that this visitor did express a pro-anthropocentric attitude (NEP subscale 4 = 2.00). This is the nature of the 'sport', where animals are seen as being lower value than humans, and humans are meant to rule over nature.

What this section has revealed is that the specific activities which visitors come to the region to pursue can be used as a guide for pro-ecological orientation. Visitors who came to the region specifically for nature-focused activities express elevated pro-ecological attitudes in comparison to other rural visitors that can be attributed to an interest and concern for the environment. Consequently it would appear that Dumfries & Galloway does attract a segment of visitors which conform to the ecotourism stereotype by having pro-ecological attitudes and an interest in nature. This then can be exploited as a mechanism for marketing more effectively. But do they consider themselves to be ecotourists, and what do visitors think this concept represents?

### **5.7 The concept of ecotourism: awareness, self-classification and associations**

The importance of confirming recognition of ecotourism ideals among visitors to Dumfries & Galloway is clearly fundamental if stakeholders are to construct the region as an ecotourism destination. If such terminology is to be used in the marketing of the region then it is paramount to ascertain ideological familiarity and associations. It is also important to voice the views of stakeholders such as Scottish Natural Heritage (SNH), the local authority and organisations such as the RSPB who manage sites of nature importance to reveal what they think of the concept of ecotourism. Stakeholder notions of ecotourism need to be matched with those of the visitors in order to avoid potential confusion. It is important to ascertain whether ecotourism is simply viewed as just nature-based tourism or if there is appreciation of the wider concept.

Although VisitScotland Dumfries & Galloway clearly view the concept of ecotourism as a conceivable strategy for the region, other key partnerships such as the Tourism and Environment Forum (TEF) are not sure about using such

terminology. In an interview with a representative of TEF it was suggested that an individual business could probably claim to be an ecotourism business, however to describe Scotland or a region as an ecotourism destination may be problematic because of the lack of quality and commitment to the environment by local authorities, enterprise companies and other stakeholders in the tourism industry. The TEF avoid using the term ecotourism because there has been an “abuse of the term across the world” and “people are a bit suspicious of what the term means”. Despite this scepticism it is difficult to argue against the ideological principles of ecotourism in attempting to provide a more sustainable tourism product. Another interviewee responsible for managing numerous nature-focused attractions across southern Scotland also avoids using the term opting instead to use “nature-based tourism” because “it is easy to understand”. The view of one SNH employee with responsibilities for encouraging access to nature sites are similar to those above although he believes that “you could probably do ecotourism” in the region but “it’s a case of terminology”. By this he means that the use of the term ecotourism should be clear and easily understood by visitors, which, at the present moment he claims is not the case. It is the principles behind ecotourism rather than the term itself that is important, although it is still fundamental to ascertain if visitors have heard of the concept.

Given that some commentators suggest that ecotourism is not a frequently used term in a European context (Blangy and Vautier, 2001) and that most visitors to Dumfries & Galloway are from the UK, it is surprising to find that almost two-thirds of all visitors had heard of the term ecotourism (Table 5.8). As might be expected noticeably more nature-focused visitors had heard of the concept.<sup>47</sup>

**Table 5.8 Awareness of the concept of ecotourism**

	Awareness of ecotourism	
	No	Yes
General rural visitor	43%	57%
Nature-focused visitor	19%	81%
All visitors	36%	64%

<sup>47</sup> The difference in awareness of the concept of ecotourism between the two segments was found to be significant when tested using the Pearson Chi-square statistic:  $\chi^2 = 5.506$ ,  $df=1$ ,  $p = 0.01$ .



Ecotourism is widely advertised through holiday programmes and newspapers although the term is usually in relation to places such as Ecuador, Africa, Australia, Belize and other highly biodiverse environments. Dumfries & Galloway is also biodiverse but is perhaps considered less exotic. Ecotourism is sometimes described both as an activity, such as wildlife watching or nature study, and as a concept or set of principles (Cater, 1994; Fennell, 1999). One thing is certain there still appears to be substantial confusion over the concept of ecotourism what it comprises, what surroundings are appropriate, the positive and negative impacts, and who ecotourists are (Cater, 1994). Considerable effort has been directed at defining ecotourism and analysts who have reviewed numerous definitions reveal that the concept constitutes three main components (Blamey, 2001; Diamantis, 1999; Fennell, 1999).

Under ideological conditions, ecotourism experiences should include an educational component since it aims to promote a conservation ethic among visitors to nature-focused sites (Blamey, 2001; Diamantis, 1999; Fennell, 1999; Valentine, 1993). This can include static interpretational material such as leaflets or interpretation boards or more personal interpretation such as organised talks (McArthur, 1998). Most visitors using nature-based sites in Dumfries & Galloway indicated that informative leaflets were extremely important/important educational materials (71%). Also valued (either extremely important or important) by visitors for learning about an attraction were interpretation boards (62%) and visitor/interpretation centres (52%), however less importance was placed on personal educational interpretation through organised talks or personal face-to-face interpretation (16%) which has been shown in other places to increase environmental awareness and encourage pro-ecological attitudes (Armstrong and Weiler, 2002; Hughes, 1991; Moscardo, 1998; Orams, 1997). It is evident that learning about attractions is important to many visitors providing a contrast with Ryan et al's (2000) research. However, the present research finds varying support for the different methods of disseminating facts about attractions. It would seem that the orthodox leaflet is the favoured source of educational material for most visitors while organised talks are less appealing. Leaflets can also be taken away by the visitors and serve as a reminder of their experience. Given that many of the nature-based sites in Dumfries & Galloway already have educational facilities including interpretation centres, ranger services and an abundance of leaflets, it would appear that this component of ecotourism is catered for.

The second component in ecotourism relates to the environment where activity takes place and ensuring that the operation is managed sustainably (Blamey, 2001). This means assessing the balance of visitation with the conservation objectives of the site and ensuring that negative impacts are kept to a minimum. This may well include using contingent valuation methods such as carrying capacity (CC) and limits of acceptable change (LAC) (Lawton, 2001). Unlike the neighbouring English county of Cumbria, Dumfries & Galloway does not have a problem with visitor volume and degradation of protected areas. The Lake District National Park receives approximately 22 million visitor days each year<sup>48</sup> and is often congested during the summer months. The situation in the study region is different with lower numbers. This was evident when interviewing several managers of nature reserves throughout the region. One reserve manager looking after Cairnmore of Fleet National Nature Reserve noted:

“This site has never had a problem of over usage, so it’s not given us great problems. It’s quite an unusual site in that we really have no access restrictions whatsoever, despite the new access legislation. People have always been free to access any part of this site. The only limitation is a voluntary ban, seasonal ban running from February through until June on parts of the Clints [rocky outcrop with steep granite faces] because of nesting bird species and that’s been agreed with climbers. It’s a voluntary thing and it works fine, and really that’s the only restriction we’ve got. So managing folk has not really been a problem”

This also appears to be the case at the popular Caerlaverock National Nature Reserve. The reserve manager believes that negative impacts are kept to a minimum by creating good path networks and zonation.<sup>49</sup> Other nature reserves such as those managed by the RSPB and the local authority (Dumfries & Galloway Council), use similar techniques to guide visitors away from sensitive sites. Managers reported that visitor numbers were not currently considered a threat to resources and there is limited physical evidence of visitor damage, therefore there is little requirement to

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<sup>48</sup> [www.lake-district.gov.uk/lake\\_district\\_docs/factsheets\\_national\\_park\\_in\\_figures\\_2003\\_update.pdf](http://www.lake-district.gov.uk/lake_district_docs/factsheets_national_park_in_figures_2003_update.pdf)

<sup>49</sup> Zonation in conservation terms refers to the zoning of sensitive areas. Access throughout the site is designed to avoid ecologically sensitive areas such as nesting sites.

conduct visitor impact studies. This is not to say that all areas of Dumfries & Galloway are free from environmental degradation that can be attributed to visitors. Box 5.1 provides a short case-study of a popular wild-camping site in upper Nithsdale, Dumfries & Galloway.

This component of ecotourism also includes the need to generate income to benefit host communities and maintain conservation efforts: economic sustainability and ecological sustainability need to co-exist (Ross and Wall, 1999). Income is often generated through entrance fees to attractions such as National Parks or nature reserves and this income can be used to support conservation efforts (Epler Wood, 2002). However, in the UK and much of Europe, access to nature reserves and National Parks is free to the public which makes generating income a more complicated task. While nature reserves and other similarly designated sites may not generate direct income they can act as the main attraction for people visiting the area as indicated by several visitors in this research. Visitors use local shops and accommodation while in the area and therefore the presence of nature reserves can benefit the wider community.

The final component of ecotourism refers to the condition of the environment where ecotourism usually takes place and the objects of interest. Ecotourism is usually associated with 'natural' areas and in particular protected spaces (Butler and Boyd, 2000; Ceballos-Lascuráin, 1996; Epler Wood, 2002; Honey, 1999; Lawton, 2001); however there are few places on earth that can really claim to be free from anthropogenic influences. There are of course varying degrees of naturalness with wilderness areas at one extreme and urban environment at the other. The concept of wilderness is usually discussed in reference to a place unaffected by humans and their activities, a place where natural processes govern environmental change and humans are at most spectators or visitors (Henderson, 1992). Urban areas, on the other hand, are extensively modified. Ecotourism is usually practiced towards the wilderness pole where there is less modification of the natural environment, rural areas are somewhere in the middle owing to the retention of some 'natural' spaces but are also modified through agriculture.

**Unsustainable visitor behaviour and poor management?**

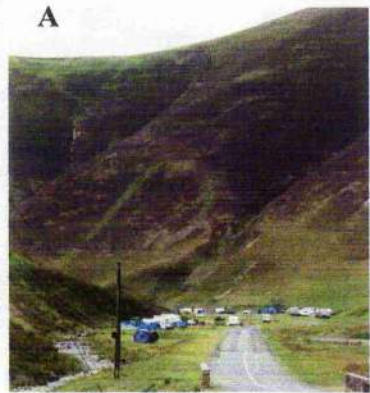
This short case-study provides an example of negative visitor behaviour at the Mennock Pass, a scenic valley in Upper Nithsdale, Dumfries & Galloway (A). During the summer months visitors descend upon the valley to camp or stay in towed caravans. Owned and leased out by the Duke of Buccleuch this area of land is primarily used for grazing sheep and occasionally cattle. Its unofficial status as a camping area is mirrored in the fact that there are no visitor facilities including toilets or bins. Subsequently it is not uncommon to find the valley littered with rubbish despite signs asking visitors to take their rubbish home (B). The concern of local residents over the unsustainable management of the Mennock Pass is evidenced in the following 'letter to the editor' in a local publication:

"To have an area of outstanding natural beauty on our doorsteps is, indeed, a privilege. However, due to the behaviour of many of those who utilise the free camping facilities, it regularly resembles a tsunami hit area with rubbish strewn far and wide, and evidence of the few simple requirements being completely ignored" (Wanlockhead Messenger, 2006: 3).

The Mennock Water which runs through the valley is an important spawning ground for Atlantic salmon helping to sustain the River Nith population. This spawning tributary is frequently 'dammed' by visitors using river-bed stones and boulders affecting flow and restricting the passage of salmon upstream to spawn (C). Parking of vehicles adjacent to the river edge has caused bank erosion in some places releasing sediment into the river, which together with the damming of this habitat, can negatively impact on the breeding success of salmon (Hendry and Cragg-Hine, 2003). The upper slopes of the Lowther Hills are managed primarily as grouse moors and another constant threat is fire. Despite the signs asking visitors not to dam the river, light fires or leave litter, this practice has come to be expected by the local communities at either end of the pass. On one occasion the signs were removed by visitors and burned as firewood.

The purpose of this short case-study is to illustrate that tourism and recreation can and does negatively impact to a greater or lesser extent on the landscape and habitats of Dumfries & Galloway. Furthermore, the economic benefits to local communities derived from this 'wild camping' is minimal given the absence of shops or other means of financially capitalising on these visitors. In terms of the social dimension of sustainable tourism development, residents living near the Mennock Pass feel it "is far from a joy for those of us who have to pass through there on a regular basis".<sup>71</sup> The solution to solving these environmental and social problems appears to lie with better management although the landowner appears content with the situation despite complaints from local communities.

<sup>71</sup> Wanlockhead Messenger, 2006, Issue 17, p.3.



Although Europe and the UK have protected areas such as National Parks and nature reserves they differ in character from similar designations in less developed and more exotic countries. The main difference is the degree of modification (Lawton, 2001). In the UK National Parks such as the Lake District and Loch Lomond and the Trossachs are home to thousands of people and are farmed, afforested, criss-crossed

by roads and power lines, worked for their resources of water and minerals and are visited by millions of tourists each year. As such the National Parks in the UK and many in Europe are given a different World Conservation Union category to National Parks elsewhere in recognition of their human impact (Lawton, 2001).

Given the emphasis on 'pristine' spaces as the venue for ecotourism it is therefore unsurprising to find that the term has not been embraced in a European context. In addition, ecotourism is often associated with the transfer of tourists from predominantly wealthy countries to less wealthy countries with significant areas of 'natural' environment or with species of wide public appeal (Honey, 1999). It is therefore not regularly associated with the culturally constructed landscapes of Europe despite these areas retaining some landscapes and ecosystems that have not been subject to extensive human intervention.

In a European context the terms rural tourism, sustainable tourism, nature-based tourism, wildlife tourism and sustainable nature-based tourism are more often used to describe ecotourism. The managers of nature sites in Dumfries & Galloway certainly preferred these terms, but they should not be considered synonymous. For example, sustainable tourism refers to the management of any tourism activity and is not restricted by the type of environment or attraction. Nature tourism could include any activity that has a focus on nature including consumptive activities such as fishing and hunting and therefore is different from ecotourism which is associated with non-consumptive nature activities. Rural tourism is a generic term to describe a variety of different activities, products and ways of consuming and presenting spaces in the countryside. Perhaps the most similar term to ecotourism is sustainable nature-based tourism which acknowledges efforts to manage natural resources for the long term and benefits the host destination.

What is evident from this discussion is that ecotourism, as an activity, is often pursued in rural areas in many ways except name. Perhaps one difference between ecotourism in Africa, Belize and other exotic countries and ecotourism in a UK context is that ecotourism activities in the former are hailed for their ability to contribute towards conservation. If this contribution is taken to mean a financial one then it becomes difficult to see how ecotourism is possible in a UK context given that

protected areas, such as National Parks and nature reserves, are free to access. If the contribution to conservation is not restricted to money and includes changes in attitudes towards nature, through interpretation or direct experiences with nature, then ecotourism is a possible strategy in modified rural areas. It is different from the type of ecotourism one might expect in say Africa where tourists are treated to a staged tribal war dance or stay in an indigenous dwelling then go elephant gazing. Rural ecotourists in a UK context might stay in farm-based accommodation or some other small-scale B&B, and instead of gazing at elephants they gaze at birds and other animals native, and in some cases rare, to the region. As Wall (1997) suggests it may simply be a case of "old wine in new bottles", an attempt to contemporise a passive rural tourism activity by appealing to a new breed of traveller with concerns for the environment.

Visitors who had heard of ecotourism were asked if they considered themselves to be ecotourists, with half of these 68 visitors saying they did. These self-classified ecotourists expressed significantly higher pro-ecological views (mean NEP = 4.14) than self-classified non-ecotourists (mean NEP = 3.85)<sup>50</sup> strongly suggesting that these two groups can be segmented on ecological attitudes. Appealing to the ecotourist may therefore reap economic benefits to destination managers. While analysis of these two segments across the sub-scales created also show that self-ecotourists express higher pro-ecological attitudes, only two were statistically significant. It would appear that self-classified ecotourists hold particularly high pro-ecological attitudes in relation to anti-anthropocentrism and rejection of exemptionalism but share similar attitudes with non-ecotourists in relation to limits to growth and the fragility of nature's balance.<sup>51</sup>

34 visitors considered themselves to be ecotourists (18 nature-focused visitors: 16 general rural visitors) and a total of 68 visitors had heard of the concept. All these visitors were asked to indicate from a predefined list which items they thought were associated with ecotourism (Figure 5.4 below). The list included a wide range of items some of which are ideologically associated with ecotourism. In terms of the

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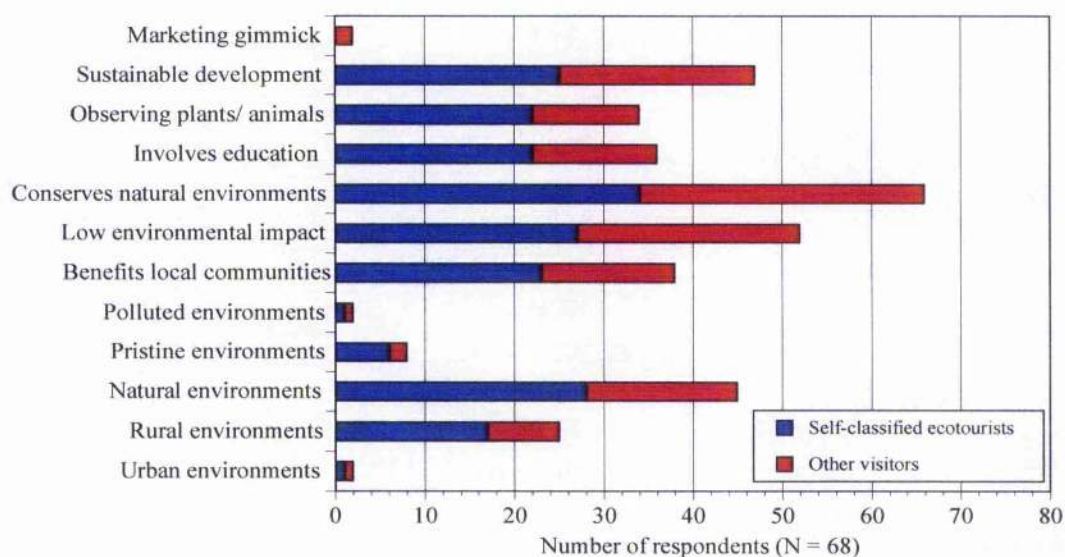
<sup>50</sup> One-Way ANOVA: mean NEP score of self-classified ecotourists and non-ecotourists ( $F = 2.025$ ,  $df=1$ ,  $p = 0.010$ ).

<sup>51</sup> One-Way ANOVA: self-classified ecotourists and non-ecotourists; rejection of exemptionalism ( $F = 10.302$ ,  $df=1$ ,  $p = 0.002$ ); anti-anthropocentrism ( $F = 4.010$ ,  $df=1$ ,  $p = 0.048$ ).

sort of environment in which ecotourism can be pursued a substantial proportion of respondents associate 'natural environments' with the concept however many respondents, especially self-classified ecotourists, associated 'rural environments' with ecotourism. This finding is suggestive of how marketing Dumfries & Galloway as an ecotourism destination might be undertaken.

Understandably there is less association with urban environments (Figure 5.4) which is also reflected in most definitions of ecotourism (Blamey, 1997; Fennell, 1999; Valentine, 1993). More respondents associated ecotourism with pristine environments as opposed to polluted settings.

**Figure 5.4 Associations with the concept of ecotourism**



Visitors conversant with ecotourism clearly associate the term with conserving natural environments and having a low environmental impact. Community benefits, which are perhaps more difficult to quantify were identified to a lesser extent. It is clear that visitors believe ecotourism involves observing flora and fauna and includes an educational element. Unexpectedly the majority of visitors associate ecotourism with sustainable development. This is surprising because recent research on public awareness of the term 'sustainable development' indicates low awareness. Typically around 30% of the UK public admit to having heard of sustainable development (Darton, 2004; DEFRA, 2002) and one might expect that a much smaller proportion

would be able to define or explain what it represents given that 'experts' can not agree.

Respondents were also asked if they thought ecotourism was simply a marketing gimmick to encourage more visitors (Horoehowski and Moisey, 2001; Orams, 1999) but only two visitors in the sample felt this was the case. Therefore, establishing the region as an ecotourism destination is unlikely to be viewed cynically by visitors who have heard of ecotourism. However, it must also be recognised that one-third of all visitors surveyed had not heard of the term ecotourism and marketing the region as an ecotourism destination may confuse this cohort.

This section demonstrates that the term ecotourism is fairly widely known among visitors to Dumfries & Galloway and connections with ideological principles have been made. There is also substantial support for practicing ecotourism activities in rural environments such as Dumfries & Galloway. However, there is less support for using the term ecotourism among stakeholders who promote sustainable tourism and manage sites of nature importance. The main problems noted by these stakeholders include the narrow focus of ecotourism, the lack of a genuine ecotourism product, and confusion over the term which does not seem justified given that many visitors could associate with broad ideological notions of ecotourism. The research indicates that ecotourists can be attracted to Dumfries & Galloway but this would only be a sustainable tourism strategy if their (the ecotourists) actions match their apparent conviction.

### **5.8 Environmental practices of visitors and membership of environmental / conservation organisations**

The analysis of the environmental values held by visitors to Dumfries & Galloway also included the collection of data relating to environmental behaviour. This section of the questionnaire required respondents to consider their domestic environmental behaviour and in particular recycling. Participants indicated the extent to which they engage in each behaviour via four closed-response options - 'never', 'sometimes', 'frequently' and 'always'. The results reveal a high level of engagement in recycling



waste paper with 92% of visitors claiming they either frequently or always recycle this material (Table 5.9). In comparison, Higham *et al.* (2001) found that 80% of ecotourists in New Zealand recycled paper.

**Table 5.9 Recycling behaviour of visitors to the study region**

<b>How often do you recycle:</b>	<b>Never</b>	<b>Sometimes</b>	<b>Frequently</b>	<b>Always</b>
Newspaper/magazines	3.7%	4.7%	18.7%	72.9%
Glass bottles/containers	3.7%	1.9%	18.7%	75.7%
Waste food	29.9%	3.7%	20.6%	45.8%
Aluminium cans	13.1%	6.5%	29.0%	51.4%

(Sample = 107)

In a survey of public attitudes towards quality of life and to the environment, DEFRA (2002) reports that paper is recycled regularly by 53% of respondents. This figure is considerably lower than that reported by visitors to Dumfries & Galloway suggesting that a high number of visitors in this research sample engage in pro-ecological behaviour. There is however the possibility that some people might want to display an 'environmentally friendly' image regardless of whether they actually do behave in an environmentally responsible manner, therefore elevating the results.

Even more support is shown and expressed for recycling glass bottles and containers with 94.4% of visitors to Dumfries & Galloway claiming they recycle these materials. Again, this figure is much higher than the 42% in the DEFRA (2002) study which includes a cross-section of the UK public. Recycling waste food or kitchen waste is clearly less popular and may partly relate to the types of dwellings in which participants live. If one stays in a flat with no access to a garden then recycling food will be difficult. The DEFRA (2002) study found that recycling waste food and kitchen waste was also the least engaged recycling activity. Other barriers to recycling, not confined to just recycling waste food, might include no kerbside collections, recycling facilities too far away, and no suitable storage space. Demonstrating a close similarity with findings elsewhere (Higham *et al.*, 2001) the rates of aluminium can recycling among visitors to Dumfries & Galloway are high among visitors with pro-ecological attitudes.

Previous studies have revealed a weak relationship between recycling behaviour and pro-environmental attitudes (Vining and Embro, 1992) and this also seems to be the case with visitors to Dumfries & Galloway when mean NEP scores are correlated with engagement in recycling. Visitors who suggested they 'always' recycled newspapers/ magazines and glass bottles/containers had the highest NEP scores, although this was not the case for those who 'always' recycled waste food and aluminium cans.

Nevertheless, these findings suggest that high proportions of visitors to Dumfries & Galloway behave in an environmentally friendly manner while at home, and furthermore 97% of all visitors suggested they would recycle waste while on holiday. While this may be reflective of participants telling researchers what they think they want to hear, if viewed more positively then tourism managers could contribute significantly to the environmental sustainability of the local tourism industry by providing facilities for recycling.

Despite these claims of recycling waste the majority of visitors did not consider themselves to be environmentally friendly (79%). This is perhaps an acknowledgment that they could do more since these visitors had notably greater pro-ecological attitudes (mean NEP = 4.02) than visitors who suggested they were environmentally friendly (mean NEP = 3.56). This is revealing in that it suggests that the NEP scale provides a better indication of environmental attitude than a simply asking 'are you environmentally friendly'.

The research also aimed to determine what proportion of visitors, if any, were members of an environmental or conservation organisation and if there are any significant differences in pro-ecological attitude between members and non-members. Cohen (2000) suggests that it is common to equate ecological consciousness with membership of environmental organisations. It would appear that this is the case in this research with 58% of all visitors' sampled (62 people) claiming membership of an environmental or conservation organisation. Those with membership of conservation organisations expressed higher pro-ecological attitudes

(mean NEP score 4.18) than non-members (3.61).<sup>52</sup> This finding is substantiated through an analysis of conservation/environmental group membership across the NEP sub-scales.<sup>53</sup> This could be considered as an 'action' associated with their pro-ecological attitudes in the same way as recycling behaviour – the action being contributing funds.

The membership of environmental or conservation organisations among visitors to Dumfries & Galloway is high in comparison to some studies which suggest that 20% of Britons claim to be members of one or more environmental organisations (Johnston and Jowell, 1999). If accurate of all visitors to the region, then it must be viewed positively since those expressing environmental concern through membership of organisations are less likely to engage in activities deemed detrimental to the environment. Although the range of organisations to which participants are members was not collected in this research, establishing these may help in promoting the region to specific groups such as members of the RSPB or the National Trust.

Perhaps reflecting their special interest in aspects of the natural environment most nature-focused visitors were members of an environmental or conservation organisation (90%), whereas most participants who visited the region for more general reasons were not members (55%). The differences between these two segments were found to be statistically significant.<sup>54</sup> Interestingly, a high proportion of self-classified ecotourists were members of an environmental or conservation organisation (82%) which was found to be significantly higher than the 47% of non-ecotourists who were members.<sup>55</sup>

This section has exposed a high participation in recycling activities among visitors to the region and has argued that this, together with relatively high membership of

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<sup>52</sup> One-Way ANOVA: environmental/conservation organisation member and non-members ( $F = 35.895$ ,  $df=1$ ,  $p = 0.00$ ).

<sup>53</sup> One-Way ANOVA: reality of limits to growth ( $F = 15.401$ ,  $df=1$ ,  $p = 0.00$ ); anti-anthropocentrism ( $F = 10.684$ ,  $df=1$ ,  $p = 0.00$ ); the fragility of nature's balance ( $F = 13.915$ ,  $df=1$ ,  $p = 0.00$ ); rejection of exemptionism ( $F = 19.679$ ,  $df=1$ ,  $p = 0.00$ ).

<sup>54</sup> Chi-square test:  $\chi^2 = 18.776$ ,  $df = 1$ ,  $p = 0.00$ .

<sup>55</sup> Chi-square test:  $\chi^2 = 12.184$ ,  $df = 1$ ,  $p = 0.00$ .

environmental/conservation organisations, bodes well for the development of the region as an environmentally friendly tourism destination.

The research findings have suggested that visitors who come to the region specifically to pursue a nature-focused activity can be segmented from general rural visitors on the basis of their pro-ecological attitudes. The research has also demonstrated that visitors who self-classify as ecotourists have higher pro-ecological attitudes than those who do not classify themselves as ecotourists. In the following section attention turns to the characteristics of these segments and aims to ascertain whether there are any significant differences between them. Addressing this will reveal if nature-focused visitors and ecotourists are distinctly different from other visitors and therefore require a more focused marketing approach.

### **5.9 Do the characteristics of nature-focused visitors, general rural visitors, ecotourists and non-ecotourists differ?**

It has already been established that there are statistically significant differences between nature-focused visitors and general rural visitors in terms of pro-ecological attitudes with the former expressing greater concern. There are also statistically significant differences in attitudes between ecotourists and non-ecotourists, again with the former segment revealing higher values. There is not however any statistically significant difference between nature-focused visitors and ecotourists in terms of overall mean NEP score or across any of the sub-scales.<sup>56</sup> Despite this nature-focused visitors and ecotourists do express significantly higher pro-ecological attitudes than the other segments in relation to rejection of exemptionalism and anti-anthropocentrism.<sup>57</sup>

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<sup>56</sup> One-Way ANOVA: Limits to growth (general rural visitor mean NEP = 3.84, nature-focused visitor mean NEP = 4.19, self-classified ecotourist mean NEP = 4.14, non-ecotourist mean NEP = 3.85),  $F = 5.506$ ,  $df=3$ ,  $p = 0.08$ ); The fragility of nature's balance (general rural visitor mean NEP = 4.35, nature-focused visitor mean NEP = 4.43, self-classified ecotourist mean NEP = 4.43, non-ecotourist mean NEP = 4.34),  $F = 0.237$ ,  $df=3$ ,  $p = 0.87$ .

<sup>57</sup> One-Way ANOVA: Rejection of exemptionalism (general rural visitor mean NEP = 3.24, nature-focused visitor mean NEP = 3.89, self-classified ecotourist mean NEP = 3.81, non-ecotourist mean NEP = 3.25),  $F = 7.894$ ,  $df=3$ ,  $p = 0.00$ ); Anti-anthropocentrism (general rural visitor mean NEP = 3.90, nature-focused visitor mean NEP = 4.31, self-classified ecotourist mean NEP = 4.25, non-ecotourist mean NEP = 3.91),  $F = 3.170$ ,  $df=3$ ,  $p = 0.02$ .

In terms of characteristics nature-focused visitors and ecotourists are alike. In fact all segments are similar and could not be statistically differentiated based on gender, trip company, country of permanent residence, number of nights spent in the region or educational qualifications (Table 5.10). In addition, all segments are alike in their choice of accommodation although most nature-focused visitors (39%) and ecotourists (32%) made more use of self-catering accommodation than any other form of accommodation. This explains why those using self-catering accommodation expressed the highest NEP scores.

In terms of pro-environmental behaviour, all segments were similar with high engagement in recycling activities. No statistically significant differences were found. However, the previous section noted that nature-focused visitors and ecotourists are more likely than other visitors to be members of a conservation/environmental group.

**Table 5.10 Characteristics of different segments**

	General rural visitor (N = 31)	Nature-focused visitor (N = 76)	Self-classified ecotourist (N = 34)	Non-ecotourist (N = 73)	$\chi^2$	df	p
<b>Age</b>					22.97	9	0.00
<30 years old	13%	0%	3%	12%			
30 – 39 years old	7%	7%	3%	8%			
40 – 54 years old	42%	13%	29%	36%			
>55 years old	38%	81%	65%	44%			
<b>Gender</b>					0.119	3	0.99
Male	41%	39%	38%	41%			
Female	59%	61%	62%	59%			
<b>Company</b>					2.737	6	0.84
Alone	12%	3%	9%	10%			
With partner	42%	52%	50%	43%			
With family/friends	46%	45%	41%	48%			
<b>Country</b>					14.06	12	0.29
Non-UK	7%	0%	0%	7%			
Scotland	29%	23%	18%	32%			
England	62%	71%	77%	59%			
Wales	0%	7%	3%	1%			
Northern Ireland	3%	0%	3%	1%			
<b>Duration</b>					1.479	6	0.96
1 – 3 nights	33%	44%	32%	38%			
4 – 7 nights	44%	39%	50%	40%			
8 + nights	23%	17%	18%	23%			
<b>Education</b>					8.029	12	0.78
None	22%	16%	15%	23%			
High school qualifications	22%	16%	12%	25%			
Trade/vocational qualifications	1%	3%	0%	3%			
Degree/diploma	41%	45%	53%	37%			
Postgraduate degree	13%	19%	21%	12%			

\*Percentages may not add-up due to rounding

Other statistically significant differences found between the different segments, apart from environmental attitudes, were age characteristics and using environmentally friendly accommodation. In terms of age characteristics, both nature-focused visitors and ecotourists tend to be older than general rural visitors and non-ecotourists (Table 5.10). Both ecotourists and nature-focused visitors are also more likely than other visitors to choose environmentally friendly accommodation<sup>58</sup>, although as highlighted earlier this conviction will only be realised if the appropriate information is readily available.

This section has shown that nature-focused visitors, general rural visitors, ecotourists and non-ecotourists are similar in terms of their characteristics. The high pro-ecological attitude expressed by nature-focused visitors and ecotourists does not mean that they have radically different characteristics from visitors with lower pro-ecological attitudes, although nature-focused visitors and ecotourists do tend to be older. In effect, all segments broadly represent the same population in terms of characteristics, however establishing Dumfries & Galloway as an ecotourism destination would benefit from targeting visitors over 55 years old. Another way of attracting those with higher pro-ecological attitudes is to encourage accommodation providers to advertise their environmental commitment or perhaps join the Green Tourism Business Scheme (GTBS) which would allow nature-focused visitors or ecotourists to identify accommodation that matches their high pro-ecological attitudes. The publications of conservation/environmental groups may be a fruitful avenue for promoting the region as an ecotourism destination since self-classified ecotourists and nature-focused visitors tend to be members.

### **5.10 Concluding remarks**

In achieving the aims of this investigation, it is revealed that the visitors surveyed in Dumfries & Galloway tend to have medium to high endorsement of an ecological worldview. It has also been shown that ecological orientation does not differ across various demographic characteristics with the exception of age, where younger visitors express less pro-ecological views compared to older visitors. While this

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<sup>58</sup> Chi-square test:  $\chi^2 = 12.695$ ,  $df = 3$ ,  $p = 0.00$ .

finding contradicts other studies of environmental orientation and age, it nevertheless provides good news for tourism development in Dumfries & Galloway since official statistics indicate that the region predominantly attracts older visitors.

The research also found that accommodation choice in Dumfries & Galloway was unlikely to be influenced by pro-ecological orientation, although interviewees and questionnaire participants noted they would consume environmentally friendly accommodation if they could identify it. Effort should therefore be directed at encouraging accommodation providers to join environmental management schemes, such as the GTBS, and advertise their environmental commitment so that visitors with high pro-ecological attitudes can make an informed choice. This is fundamental if the region is to be promoted as an ecotourism or environmentally friendly destination.

By segmenting all survey participants based on visiting the region to pursue a specific nature-focused activity, the research was able to assess whether nature-focused visitors had higher pro-ecological orientations than other visitors with less explicit travel motivations. The findings revealed that these segments did indeed have significantly different levels of NEP endorsement with nature-focused visitors expressing higher pro-ecological views. This was not only evident with regards to the overall mean NEP value but also across three of the four sub-scales to emerge from the factor analysis. This finding therefore provides support for the establishment of the region as an ecotourism destination given that ecotourists are usually identified by the types of activities they pursue and their concern for the environment.

It would appear that an ecotourism market already exists and accounted for 29% of all visitors in the immediate survey. This proportion is high in comparison to other studies suggesting that nature-focused visitors account for just 2% of all holiday trips to Scotland (VisitScotland, 2004b), although this may be a sampling artefact. Nevertheless, the purpose of the research was not to establish the extent of the market but was to investigate potential segmentation based on specific nature-focused activities and ecological orientation. This investigation found that nature-focused visitors tended to pursue fewer general rural activities while in the region in comparison to other visitors which probably reflects their specific interest in nature.



Using the NEP scale it was found that all visitors pursuing nature study/wildlife watching and nature photography held significantly higher pro-ecological views than those not pursuing these activities.

In terms of the suitability of using terminology such as 'ecotourism' it was discovered that almost two-thirds of all visitors had heard of ecotourism. This research has also discussed the key dimensions of ecotourism and argued that these dimensions are already facilitated in the region. What visitors associate with ecotourism broadly demonstrates some knowledge of the concept and is congruent with definitions supplied through the academic literature. Half of the visitors who had heard of ecotourism self-classified themselves as ecotourists and these visitors, like the nature-focused visitors, expressed significantly higher pro-ecological attitudes in comparison to self-classified non-ecotourists. Three-quarters of all nature-focused visitors considered themselves to be ecotourists. Therefore in this study the 34 self-classified ecotourists represent a mix of nature-focused visitors (53%) and general rural visitors who did not come to the region to pursue a particular nature-focused activity (47%). This finding informs us that branding the region as an ecotourism destination is unlikely to confuse both nature-focused visitors and general rural visitors.

In terms of environmental behaviour the research has shown that engagement in recycling is high among visitors to the region. However, some doubt is cast over claimed levels of involvement since other research in the UK indicates much lower rates of participation. The research has also shown that visitors with pro-ecological orientations are also more likely to be members of environmental or conservation organisations. Around 58% of all visitors were members of an environmental or conservation organisation, this is considerably higher than estimates of 20% for the UK. Membership was found to be highest among participants segmented as nature-focused visitors. Again this is positive news for tourism stakeholders in the region who can be fairly confident that visitors are less likely to deliberately damage natural assets.

## **CHAPTER SIX**

### **6 FARM-BASED ACCOMMODATION IN DUMFRIES & GALLOWAY: A SUSTAINABLE FORM OF RURAL TOURISM AND STRUCTURAL DIVERSIFICATION STRATEGY?**

#### **6.1 Introduction**

The previous chapter provided an analysis of ecological attitudes of visitors to Dumfries & Galloway contextualising the findings with reference to moving towards sustainable rural tourism development. It has been argued that the pro-ecological attitudes of visitors are fundamental in achieving stakeholder goals of developing the region as an ecotourism destination but of equal importance is the sustainability of tourism supply. This chapter investigates tourism supply in the form of farm-based accommodation and how this contributes or otherwise to achieving sustainable rural tourism development. Farm-based accommodation is not the only form of rural accommodation although it is afforded special attention here because it is relatively under-researched in Scotland (Gladstone and Morris, 1998) and little is known about this sub-sector in Dumfries & Galloway.

In this chapter farm-based accommodation will be probed in three main ways which form the holistic concept of sustainable tourism development. These include:

- Farm-based accommodation as a sustainable economic activity.
- Farm-based accommodation as an environmentally sustainable form of rural tourism.
- Farm-based accommodation as a socially sustainable form of rural tourism.

This chapter will investigate the economic sustainability of farm-based accommodation in a variety of ways, for example, through its ability to create employment in Dumfries & Galloway. Equally important for sustainable tourism development is the need to generate income and this chapter will investigate this by critiquing the proportion of farm household income derived from tourism revenue. Economic sustainability also requires the creation of specific and realistic business

goals, networking and developing a brand identity, and all these aspects will be investigated. The environmental sustainability of farm-based accommodation will be probed through an investigation of the uptake of the Green Tourism Business Scheme (GTBS), the environmental practices of operators and the importance of the farm environment as part of the accommodation product. The ways in which farm-based accommodation contributes and impacts on social sustainability is investigated by critiquing its role in sustaining agricultural identity, farm tourism and empowerment, operator satisfaction, reducing isolation, as an educative experience, and difficult aspects of operating both farm and agricultural businesses.

Before these are discussed the chapter proceeds by firstly investigating the extent of farm-based accommodation provision in Dumfries & Galloway and the rationale behind its development in the agricultural sector.

## **6.2 Extent of farm-based accommodation**

It has been recognised for some time that pluriactivity (the generation of income from non-farming activities and sources either on or off the farm) among farmers seems to be growing in response to the restructuring of agriculture (Bryden *et al.*, 1993; Shucksmith *et al.*, 1989). Some researchers have reported that as much as 77% of Scottish farmers and spouses supplement farm income through alternative means (Slee *et al.*, 2001). Among the various pathways open to farmers is “the redeployment of farm resources (including human capital) into new non-agricultural products or services on the farm” (Ilbery and Bowler, 1998:71). This structural diversification pathway includes the provision of tourism facilities such as accommodation.

The EC Farm Structure Survey (FSS) informs us that in 2003 there were 2,115 main agricultural holdings in Scotland engaged in ‘tourism accommodation and other’.<sup>59</sup> This figure amounts to 8% of all main agricultural holdings in Scotland although there is no indication of how many minor agricultural holdings are engaged in

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<sup>59</sup> Personal communication with Sarah Simpson, Scottish Executive Environment and Rural Affairs Department (SEERAD), 25 October 2005

tourism provision. What is included in the 'other' is not disclosed; however it might include visitor attractions, nature trails and farm shops. This 8% is similar to the situation in England (10%) but there are significantly more farms and therefore more farm-based tourism businesses in England (Denman, 1994a).

The FSS does not provide us with a regional breakdown of tourism engagement across Scotland therefore the extent of farm-based accommodation in Dumfries & Galloway was established by other means. This has been discussed in the methodology in relation to establishing the sampling frame for this research. In total, 110 farm-based accommodation providers in Dumfries & Galloway were identified. This amounts to 5% of the farms identified through the FSS and 4.4% of all main agricultural holdings in Dumfries & Galloway. These figures appear quite low in comparison to some regions in England, for example in the North East 11% of agricultural holdings are involved in tourism provision.<sup>60</sup> This might suggest that many farmers in Dumfries & Galloway do not see the need to diversify or that pluriactive farmers have chosen alternative pathways as they adjust to the post-productivist transition.

Farm-based tourism may not be a good option for farmers in some rural areas. Research has shown that location, access to potential markets and local need for facilities may limit the potential of this structural diversification option (Bateman and Ray, 1994; Walford, 2001). Predictably farm-based accommodation is more likely to succeed in a scenic location or where the environment facilitates outdoor activities (Walford, 2001). What is considered aesthetically pleasing to one person will of course be different to the next person, but in general, farmers in Dumfries & Galloway are unlikely to forgo developing a tourism business on aesthetic grounds. The region has three important National Scenic Areas (NSAs) recognised for their aesthetic qualities. Furthermore, the diverse environment of Dumfries & Galloway provides access to hills, moors, valleys, lochs and seaside which facilitate outdoor activities.

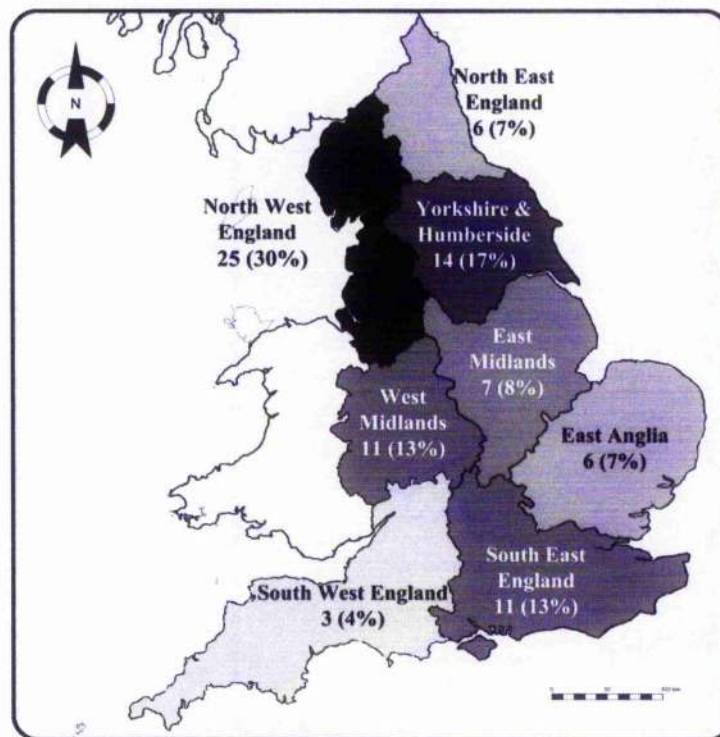
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<sup>60</sup> [www.defra.gov.uk/erdp/docs/default.htm](http://www.defra.gov.uk/erdp/docs/default.htm)

Farmers in Dumfries & Galloway are also unlikely to avoid developing a tourism enterprise on the basis of poor access to potential markets although transport links within the region are considered a barrier to fulfilling the region's tourism potential. As described in Chapter Three, the region is dissected by the main Scotland to England motorway and can be reached by large urban populations in less than three hours. Residents of the central belt are one of the main markets for the region but English visitors represent the largest market (Dumfries & Galloway Tourism Board, 2001). From a sample of 122 visitors using farm-based accommodation in Dumfries & Galloway, over three-quarters were from England and most of these were from the North West, Yorkshire and Humberside (Figure 6.1). The west of the region also has a ferry terminal at Stranraer providing access to potential markets in Northern Ireland although this market remains low in Dumfries & Galloway (VisitScotland, 2004a).

Whilst access to the extremes of the region, Gretna and Stranraer, is easy, the interior can be difficult to reach because of the lack of an effective east-west network - either train or road. There is also the problem that the M74 dissects a part of the region which is arguably less scenic than further west and this may deter people from visiting Dumfries & Galloway. The train from Stranraer to Ayr also provides little insight into the scenic qualities of the region and effectively transports visitors to either the ferry terminal or northbound.

**Figure 6.1 English markets for farm-based accommodation**



(Source: Data collected in the farm-based visitor survey)

Low levels of demand for accommodation facilities locally is one reason why some farmers may opt for other forms of pluriactivity rather than on-farm tourism facilities (Walford, 2001). Competition between different operators may be fierce and therefore dilute the effectiveness of enterprises to generate income. New enterprises may be accommodated if they can be differentiated from existing establishments, perhaps on a quality basis or by incorporating visitor activities on the farm. Those who seek funding through the Farm Business Development Scheme (FBDS) need to validate demand for accommodation locally, again demonstrating the influence of competition (Scottish Executive, 2005). Since 2001 when the FBDS was launched, some forty-two farm-based accommodation enterprises in Dumfries & Galloway have convinced the grant providers there is a need for more, or up-graded, accommodation facilities.<sup>61</sup> It would therefore seem that the saturation point has not yet been reached in all areas of the region although one interviewee noted she was refused grant support under the FBDS on the basis of surplus of holiday

<sup>61</sup> Personal communication with Sarah Simpson, Scottish executive Environment and rural affairs Department (SEERAD), 25 October 2005.

accommodation in her area near Langholm. Regardless of this advice she started her accommodation business by funding it herself in full. There are fewer farm-based accommodation facilities in the vicinity of Langholm although the area already has six B&Bs, three camping/caravan sites, four hotels and eight self-catering enterprises, thus providing some indication why this particular enterprise owner was refused grant support.

There are a number of other reasons why tourism development may not be a suitable, preferred or achievable pathway for all farmers. Gannon *et al.* (2000) argue that farmers view planning policy as the greatest obstacle to diversification and 32% of farmers in this research noted that gaining planning consent was problematic. Social factors such as the stage in the family life cycle, a lack of tourism skills, a lack of desire to 'harvest the tourist crop' and economic factors such as the low additional income that tourism provides in comparison to off-farm employment opportunities (Ilbery and Bowler, 1998; Questions Answered Ltd., 2004) may also have an impact on the decision to diversify into tourism. Fundamentally, starting a farm accommodation business requires significant investment, especially if developing self-catering accommodation, and many interviewees were quick to highlight this as the greatest barrier to initially overcome.

"The main problem is the cash flow. If you want to develop anything you've got to pull it out your surplus cash, if you've got any, and that's the big problem because if it is a new development it requires quite a lot of capital expenditure" (Farmer N)

Even where grant support is available many farmers in this sample found it difficult to raise the required match funding and opted instead to develop their enterprise over a longer period of time using their own finances.

"We've approached people for grants but there is always conditions attached. What I wanted to do is to manage the whole job myself and do the lot. I can plaster, I can build walls, I can plumb, and I can do electric. The people who lend the money [FBDS] said no and this was not an option. They would give us 50% of £50,000 for renovation but we have to

find £25,000, which means borrowing it, and we weren't prepared to do that. Had they given us the £25,000 and let me do the work and the organising of it, then I reckon I could have kept the cost down but they weren't prepared to do that. As a result I'm trying to do a little bit myself, if I have some spare cash I just stick it straight into it, but its going to take a while to do unfortunately" (Farmer B)

Half of all questionnaire respondents suggested that raising the required capital for developing their tourism enterprise had been problematic and many viewed the investment as a risk similar to investments in agriculture. The lack of available capital is therefore a significant barrier to adopting tourism as a diversification strategy regardless of grant support. For some farmers diversifying into tourism does not hold any particular appeal and therefore reaction to agricultural restructuring has been to find off-farm non-agricultural work within the public service sector.

"It's not my cup of tea at all. I wouldn't like having a bed and breakfast. I don't fancy having people in my house all the time" (Farmer A)

Diversification into tourism is evidently not just about external forces such as location and access to markets but is influenced by available capital and resources, and also the personal preferences of farmers. This will be explored further in a later section.

### *6.2.1 The geographical distribution of farm-based accommodation in Dumfries & Galloway*

It has been established that farm-based accommodation enterprises in Dumfries & Galloway are not abundant but adoption of this form of structural diversification will be influenced by their spatial distribution in relation to popular tourism locations. Walford (2001) noted that in England and Wales farm-based accommodation was found to be clustered around designated scenic areas. In Dumfries & Galloway, three



National Scenic Areas (NSAs)<sup>62</sup> exist and therefore could act as a locus for tourism activity. This designation was first established in 1980 however a review of all NSAs in 1997 found the designation to be ineffective in sustaining high quality landscapes and deriving economic and social benefits. Subsequently, SNH provided guidance to the Scottish Executive in 1999 which led to the creation of four pilot NSA management strategies in Scotland during 2003, three of which are in Dumfries & Galloway. Tourism and recreation is a fundamental part of the new NSA strategies in the study region as indicated by the following specific aim:

“Encourage enjoyment of the area where it is consistent with conserving and enhancing the environment, particularly where it plays a role in assisting economic and social opportunity” (Dumfries & Galloway Council and Scottish Natural Heritage, 2003a)

While the NSA designation may be over twenty-five years old the emphasis on these designated areas as spaces of sustainable tourism and recreation provision is relatively recent. Therefore the NSAs in Dumfries & Galloway may not yet have made a significant impact in either attracting visitors or creating opportunities for farmers in the vicinity to capitalise on the scenic qualities of these areas by offering accommodation.

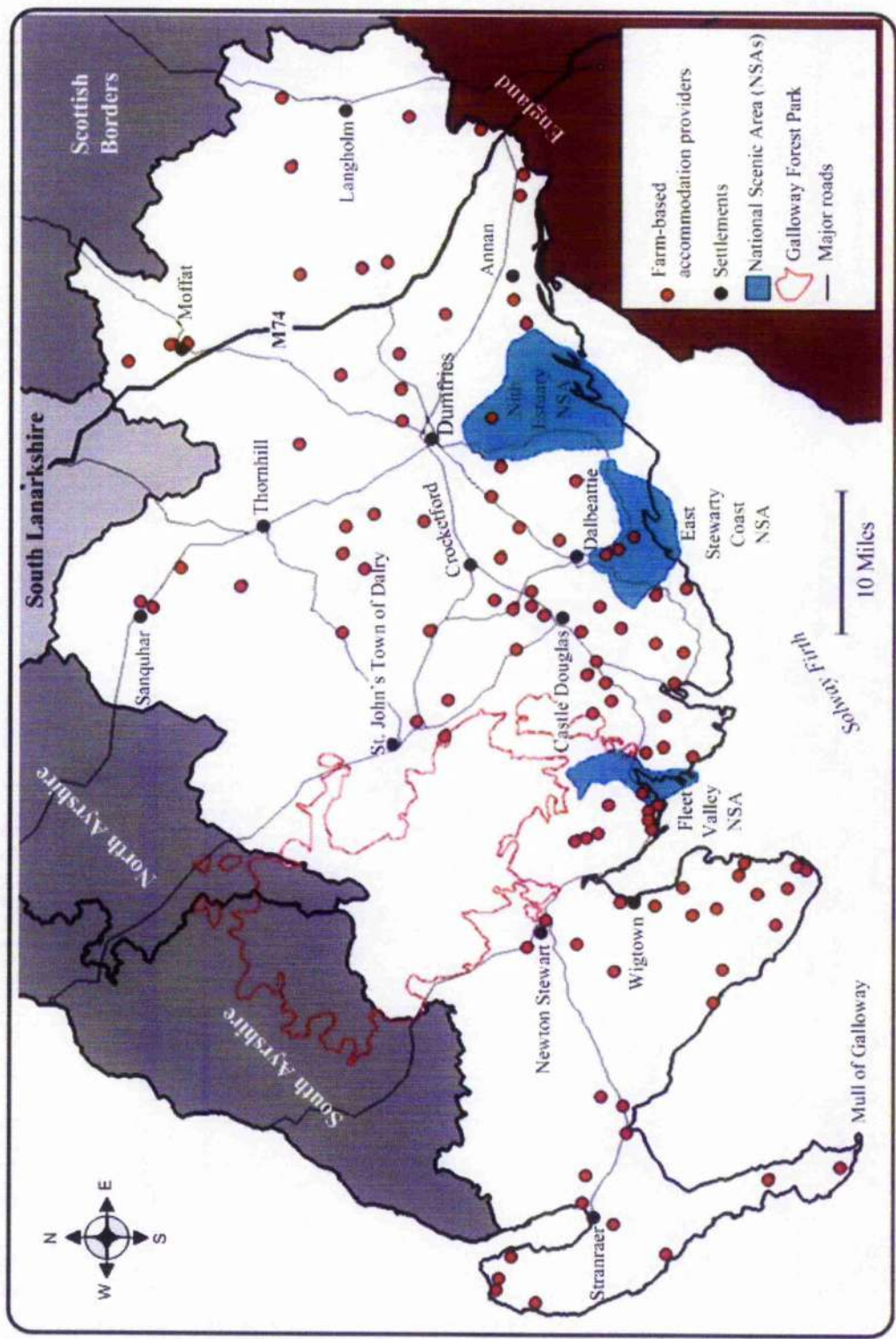
Using postcode data, the distribution of farm-based accommodation in the region is shown in Figure 6.2. It is immediately apparent that farm-based accommodation is fairly widespread throughout Dumfries & Galloway although sparser in the east of the region. East of the M74 is a less visited area of Dumfries & Galloway and as indicated in the previous section there is less demand for farm accommodation. The central parts of the region appear to host the majority of farm-based accommodation which may reflect the high scenic value of this area and recreational facilities such as Galloway Forest Park. 12% of all farm-based accommodation can be found within a six mile radius of Castle Douglas and more than 30% within a twelve mile radius of the town. Outwith the Castle Douglas area clusters of farm-based accommodation are found around the Fleet Valley NSA (furthest west) and The Machars peninsula south

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<sup>62</sup> NSAs are Scotland's only national landscape designation.

of Newton Stewart. The Machars area has some sixteen farms engaging in accommodation provision, capitalising on archaeological and historical attractions including the remains of the thirteenth century St. Ninian's Chapel. Scotland's national Book Town is also located in Wigtown which is a further cultural attraction helping to sustain accommodation and other services in the vicinity.

Figure 6.2 Distribution of farm-based accommodation in Dumfries & Galloway



Whilst there is definite clustering around Fleet Valley NSA and to a lesser extent around East Stewarty Coast NSA, therefore partly supporting Walford's (2001) observation, there are fewer farm-based accommodation enterprises near the Nith Estuary NSA to the south of Dumfries. The close proximity to Dumfries with its critical mass of accommodation may explain the lack of farm accommodation although the relatively rich soil around the estuary may mean that this area is quite productive and therefore there is less need for farmers to diversify.

The spatial distribution of farm accommodation enterprises across the study region has shown that this phenomenon is not concentrated in one particular part of the region but has been employed by farmers in coastal and upland environments. In this respect farm accommodation in the region conforms to Moscardo et al's (1996) notion of ecologically-sustainable tourism since the economic and social benefits as well as negative impacts are spread through the region. The social, economic and environmental benefits of diversification into tourism, as discussed in forthcoming sections, is therefore spread throughout the region although there is evidence of some clustering around the popular town of Castle Douglas, The Machars peninsula and Fleet Valley NSA. NSAs are subject to special planning conditions and not all types of accommodation may be appropriate, for example caravan parks are unlikely to add to scenic quality but the renovation of a redundant traditional barn or cottage may prove beneficial both scenically and economically (Dumfries & Galloway Council and Scottish Natural Heritage, 2003b).

#### *6.2.2 Farm-based accommodation providers: Bystanders or stakeholders?*

An important aspect of sustainable development and Agenda 21 and the premise of participatory development is the notion of 'stakeholder participation'. This means that those affected by decisions should have the right to be included in the planning process (UNEP, 2003). Yet it has been suggested that the low level of farm tourism in Scotland has resulted in enterprise owners and managers of these facilities being considered "bystanders" rather than "stakeholders" meaning that their voice is seldom heard and their contribution to tourism may be undervalued (Slee, 1998: 94). It can be argued that all businesses and communities are stakeholders to a greater or

lesser degree given that tourism is woven into the fabric of everyday life; however, the purpose of this critique is to establish whether farm-based enterprise owners merit special attention with regards to their role as tourism service providers. To achieve this, the number of farm-based accommodation businesses will be assessed against the total number of accommodation businesses, and then the number of bed-spaces available will be considered thus providing an indication of whether operators should be classified as important stakeholders in the regional tourism sector.

In Dumfries & Galloway the 110 farm accommodation businesses represent around 20% of all rural accommodation businesses, therefore one can argue that these enterprise owners have a significant stake in the tourism system and merit a higher profile than they currently attain (Table 6.1).

**Table 6.1 Types and number of farm-based accommodation businesses and total number of VisitScotland registered businesses in the study region and Scotland**

Accommodation provision*	Farm-based accommodation businesses (% of total reg.)	Total registered businesses in Dumfries & Galloway <sup>1</sup>	Total registered establishments in Scotland <sup>2</sup>
Bed & breakfast/guesthouses	35 (21%)	167	3269
Self-catering accommodation	60 (23%)	257	9727
Campsite/caravan site	5 (13%)	39	278
Hotels/motels	-	90	1228
Mixture of accommodation	10	-	-
<b>Total</b>	<b>110 (20%)</b>	<b>553</b>	<b>14 502</b>

\*Excludes Inns, Youth & Group accommodation. Data obtained from: [www.staruk.org.uk](http://www.staruk.org.uk); [www.visitscotland.com](http://www.visitscotland.com).

<sup>1</sup>There is no compulsory registration scheme in Scotland for accommodation and therefore not all facilities in the region will be members of VisitScotland. Some enterprises may use other accreditation schemes such as the AA or RAC if any at all. Figures provided by Scottish Enterprise Dumfries & Galloway.

<sup>2</sup>The figure for self-catering accommodation is number of units (Tourism Resources Company, 2005). Data on the number of businesses could not be sourced.

Although their status as stakeholders is confirmed by the number of farm tourism businesses in comparison to the total number of registered businesses in the region, the number of bed-spaces they provide in Dumfries & Galloway may relegate them to a bystander status (Table 6.2).

**Table 6.2** Types of farm-based accommodation provision, number of available bed-spaces/pitches, and proportion of questionnaire respondents

	Number of available bed-spaces/pitches <sup>1</sup>							Mean spaces
	≤ 6	7-12	13-18	19-24	25-30	31-36	≥37	
Self-catering only	37%	44%	4%	4%	4%	4%	4%	13.5
Bed & breakfast only	80%	15%	5%	-	-	-	-	6.4
Mixture of accommodation	29%	43%	29%	-	-	-	-	9.3
Caravan/campsite only <sup>2</sup>	-	-	-	-	-	-	100%	50
<b>Combined total (N = 60)</b>	<b>51%</b>	<b>33%</b>	<b>7%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>4%</b>	<b>11</b>

<sup>1</sup>Percentages may not add up due to rounding.

<sup>2</sup>Only one caravan/campsite business responded to the self-administered questionnaire therefore a note of caution is applied.

Using data collected via questionnaires (sample = 60) and applying these to the total population (110) the average number of bed-spaces offered on farms in Dumfries & Galloway is estimated at 1377±118 (margin of error 8.57%).<sup>63</sup> In comparison, data from VisitScotland suggest there are 5199 registered bed-spaces available in the region although this excludes campsites/caravan sites.<sup>64</sup> Morrison (1998) suggests that there are 9983 caravan/campsite pitches in Dumfries & Galloway providing a conservative combined total estimate of 15,183 available bed-spaces in the region. This suggests that around 9% of available bed-spaces in Dumfries & Galloway are located on working farms. Some caution is required here since there is no compulsory registration scheme for accommodation and each caravan/campsite pitch can accommodate more than one person. While it is evident that farm accommodation is not a major provider of bed-spaces it plays a fundamental role in supplying accommodation in relatively remote areas outside the major towns and villages of the region. It would appear that farm B&Bs in the study region conform to findings elsewhere in the UK, Canada and Sweden suggesting that six or fewer bed-spaces is typical (Dernoi, 1991a; Gössling and Mattsson, 2002; Questions Answered Ltd., 2004; Weaver and Fennell, 1997). One reason for this may be

<sup>63</sup> Calculation: farm bed-spaces = (N of B&B (35) x Mean bed-spaces (6.4)) + (N of self-catering (60) x Mean bed-spaces (13.5)) + (N of mixture of accommodation (10) x Mean bed-spaces (9.3)) - (N of caravan/campsite (5) x Mean pitches) = 1377.

<sup>64</sup> [www.staruk.org.uk/default.asp?ID=591&parentid=512](http://www.staruk.org.uk/default.asp?ID=591&parentid=512)

because, in the UK especially, more than six bed-spaces requires compliance with demanding fire regulations.<sup>65</sup> However, recent changes in legislation (in 2006) means that all accommodation businesses will need to conduct a fire safety audit regardless of the number of bed-spaces and therefore farm accommodation enterprises may increase their capacity in the future. There will of course be more practical reasons such as the lack of available rooms in farmhouses that determine the number of bed-spaces available.

In terms of self-catering farm accommodation, the findings in Table 6.2 suggest the presence of two units each sleeping six to seven people. This is similar to self-catering farm accommodation businesses in North West England (Questions Answered Ltd., 2004). Whilst small-scale enterprises are the norm, some farm-based self-catering enterprises in Dumfries & Galloway are of a substantial size and therefore do not fit within the generalisations above. Those enterprises offering a considerable number of bed-spaces may however be considered small-scale in terms of employment, a point to explore in detail when considering economic sustainability. Table 6.2 shows that 20% of farm-based self-catering providers appear to provide much greater bed-space capacity than the average. One interviewee has sixteen letting properties (96 available bed-spaces) on his 101 hectare organic farm which is three times the size of the average number of bed-spaces available in hotels in Dumfries & Galloway.<sup>66</sup> This calls into question the authenticity of this enterprise being described as farm-based accommodation given that it has more in common with mass tourism than small-scale alternative tourism. The owner still farms the land and views himself as a farmer first and foremost although concedes that his household income, at the time of interview, was entirely composed of tourism revenue.

By and large, farm-based accommodation in Dumfries & Galloway does conform to the size characteristics of similar enterprises elsewhere in the UK and abroad, and as a result may be a contender in supporting the region's desire to develop as an ecotourism destination. In general it merits Moscardo et al's (1996) classification as

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<sup>65</sup> <http://news.bbc.co.uk/2/hi/business/3683742.stm>

<sup>66</sup> 2002 figures. N of hotels/motels bed-spaces in Dumfries & Galloway (2840) / (102) N of hotel/motels in Dumfries & Galloway. Source: [www.staruk.org.uk/default.asp?ID=591&parentid=512](http://www.staruk.org.uk/default.asp?ID=591&parentid=512)

ecologically-sustainable accommodation in terms of its scale. Farm accommodation has a wide distribution bringing economic and social benefits to remote locations in the region. In order for this diversification strategy to be economically sustainable for farm diversifiers in the future it is important that local conditions and the need for accommodation are given serious consideration. It is argued that farm-based accommodation providers can be considered stakeholders in the regional tourism system owing to the contribution to the sector. Therefore, in keeping with principles of Local Agenda 21 and sustainable tourism development, their involvement in the planning of the region's tourism and agricultural future is important (UNEP, 2003). One difficulty of including stakeholders in development planning (often called 'stakeholder negotiation') is that the designation of stakeholders with sufficient standing to be included is often debatable.

### **6.3 Reasons for starting farm-based accommodation businesses**

It probably goes without saying given commentary elsewhere (Ilbery and Bowler, 1998; Marsden, 1998) that farmers in Dumfries & Galloway have diversified because of agricultural restructuring, or in the words of one interviewee:

"Agriculture's stuffed and we have to diversify to try and stay afloat basically" (Farmer B).

Consequently it is not surprising that 67% of enterprise owners surveyed (sample size = 54) stated the need to 'generate additional income' as the main reason they started a tourism enterprise (Table 6.3). Further comments are:

"Agriculture is just being strangled and the returns...you just can't get the return for the investment; it's the be all and end all of it! And certainly the way things are looking for the future I can't see any improvements" (Farmer B)

"[Agriculture at the moment is] horrendously bad. Terrible. There is no profits, no encouragement from the government in fact the opposite. Sales



arc bad, there's no confidence in the market and no confidence in the government. And a terrible amount of over-monitoring and paperwork. The red-tape is horrendous. It's no fun" (Farmer C)

Most respondents in this research operate a conventional or traditional farm (70%) and 44% are cattle and sheep farmers managing land which is designated as Less Favoured Area (LFA) in recognition of the lower productivity and higher production costs of farming in upland environments. These farms are reported to be some of the lowest earning farm types in Scotland (Scottish Executive, 2006c) which helps to explain their need to diversify. Half the farmers in this sample operate large farms (mean farm size = 264 hectares), twice the size of the regional and Scottish average, with 42% operating farms equal to or less than 120 hectares. As such this finding partly reiterates Ilbery and Bowler's (1998) observation that diversifiers operate large farm businesses.

**Table 6.3 Reasons why enterprise owners started their tourism business**

<b>Reasons stated</b>	<b>Proportion of sample (N = 54)</b>
To generate additional income	67%
To make use of redundant cottages/buildings	46%
I enjoy meeting people/ feel less isolated	9%
So I can work from home	7%
To make use of a large farmhouse	6%
The tourism business was already started	6%
Because of foot-and-mouth disease (FMD) problems	4%
Because we stay in a scenic location	2%
For a challenge	2%
I have an interest in tourism	2%
To support my family	2%
For a change of lifestyle	2%
So I can retire comfortably	2%

Increasing farm incomes was not the only reason for diversification. A substantial proportion suggests they diversified into tourism to make use of redundant cottages, a finding also evident from research in Orkney (Gladstone and Morris, 2000). Most farm-based accommodation enterprises in Dumfries & Galloway provide self-

catering cottages (Table 6.1) and this partly reflects the impact of agricultural restructuring. Similar to other places many farms in Dumfries & Galloway would have had full-time employees who traditionally lived in a 'tied cottage' to the farm. As mechanisation and specialisation in agriculture increased the requirement for additional general labour decreased, and this has been further compounded by falling agricultural prices and reduced levels of subsidies leaving many farmers unable to afford additional labour (Ilbery and Bowler, 1998). As a result of these forces many tied cottages on farms have become redundant. The following interviewees who operate farm-based self-catering enterprises in Dumfries & Galloway confirm that a declining agricultural labour force and difficult farming conditions were influential in developing their tourism enterprise:

"Thirty years ago we had one spare cottage, then with the reduction of farm workers ten years ago we had two properties, which are now used for self-catering" (Farmer D)

"At one time a chap who worked on the farm was living there, but we found that with the state of affairs with dairy farming... We had to make the worker redundant because we couldn't afford to keep him and there was a house sitting there not being used" (Farmer E)

"When we came here 12 years ago and bought this farm, there was a shepherd's cottage on the property. But 12 years ago, if you did your sums in farming it didn't pay to employ a shepherd, so there was a cottage sitting empty. So we thought, we couldn't afford a shepherd which is probably what we should have done, so we better just let it out. So we let it out for a long let and then I just thought let's try it as a holiday cottage" (Farmer C)

Farmers have been able to capitalise on these vacant assets by converting them for tourism use, occasionally with considerable government support through grant schemes such as the Farm Diversification Grant Scheme (1988-1993) and the FBDS (2001-2006). However, given that only two interviewees and three questionnaire respondents in Dumfries & Galloway indicated they started their enterprise with

grant support, this suggests that farmers will diversify without government incentives. This finding replicates other studies from England and Wales (Edwards *et al.*, 1994; Ilbery and Bowler, 1993). Reflecting the conditions that need to be met for diversification grant support, one interviewee felt:

“There seemed to be too many obstacles to apply for grant aid” (Farmer H)

Whereas one successful applicant found filling in the FBDS form a rewarding and beneficial experience that helped to focus her business strategy:

“Filling in the form was a bit tedious and a pain in the neck...[but]...turned out to be really good because I knew exactly what direction I was going in and I had thought it all through and it was just a case of putting it in to action” (Farmer K).

Developing redundant farm cottages allows farmers to keep the property in the family, increase the capital value of the farm and generate some income from the tourism business at the same time. Recycling redundant farm structures and bringing these into new use is not only sustainable from an economic and social perspective but can also enhance the appearance of the countryside and therefore have environmental benefits (Simpson and Brown Architects, 2001). Not all the farmers in this study had redundant cottages or barns to convert: some have purpose-built chalets, log-cabins or other structures to accommodate visitors.

Benefits from developing self-catering enterprises, as opposed to B&B accommodation, include a less demanding host-guest relationship and lower daily maintenance. One interviewee who operates a 41 hectare traditional cattle and sheep farm noted the time/labour benefits:

“Once a week, on a Saturday, is taken-up cleaning up after guests, but generally the maintenance is very low...then once every three years or so we redo them again. We can redo the cottages within a day. Every year we spend some time painting and doing minor stuff. It’s not like they constantly need our attention” (Farmer E)

Potential time/labour input into the tourism business in addition to existing available farm structures and financial capital, may be an important factor for farmers and spouses when deciding what form of accommodation to develop. A positive aspect of developing self-catering stems from the flexibility it provides visitors in light of changing uses of the countryside and activity-focused holidays (Cater and Smith, 2003) although it is generally more expensive and therefore may not be an option for some cash-poor farmers.<sup>67</sup> An important aspect of sustainable tourism (however it is defined) is that it must meet the needs of the 'host' community as well as the visitors and the development of these self-catering enterprises certainly appears to conform to this social sustainability requirement. Aspects of social sustainability are given greater attention in a later section.

Among the more interesting reasons for diversifying into tourism followed from the epidemic of Foot-and-Mouth Disease (FMD) which, as already alluded to, had a devastating impact on the study region in 2001. Two enterprise owners gave the Foot-and-Mouth Disease (FMD) epidemic as a reason for diversifying into tourism. Why this should serve as a reason for diversifying into tourism is unclear given that tourism enterprises in rural areas were also adversely affected by FMD highlighting the vulnerability of both industries. Arguably farm-based tourism operators were especially vulnerable given that FMD affected livestock as well as the tourism business with the latter receiving no compensation for lost trade. One interviewee was particularly expressive about the situation he found himself in during the FMD epidemic:

“This is something I feel strongly about. As a farm we diversified out of farming and into tourism which is where we're being pushed, bullied, cajoled and pulled into doing by the government. Having done that, and transferred the capital I had invested in my livestock into my tourism business, when foot and mouth struck all the capital that I had tied up in my livestock was now in my tourism business, so I got no compensation. I got some compensation for what livestock I did lose, but my business losses were on my tourism business and my toilet business. So both these

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<sup>67</sup>The Scottish Agriculture College website provides some estimates with regards to different types of farm accommodation: [www.sac.ac.uk/consultancy/farmdiversification](http://www.sac.ac.uk/consultancy/farmdiversification)

businesses suffered a far greater financial loss due to foot and mouth than the farming business did, but that only resulted because I done what everybody was being encouraged to do, get out of farming” (Farmer N).

This interviewee highlights a particular problem with regards to the economic sustainability of tourism as a diversification strategy. He feels the government placed him in this position whilst failing to make clear the risks of diversifying. Farmer N also noted that FMD affected his mobile toilet supply business, another way in which this farmer has diversified and evidence that pluriactivity can take diverse forms. Despite this, Morris (2002) reports that in Cumbria, the region in the UK most affected by FMD, the Cumbria Farm Tourism Initiative received around 90 enquires from farmers about diversification options in the latter half of 2001. Although the interviews and surveys used in this thesis provide little direct evidence to suggest that FMD was influential in stimulating greater interest in diversification, 42 farm-based accommodation enterprises in Dumfries & Galloway have been up-graded or established through the FBDS since 2001 and one fifth of respondents to the 2005 questionnaire have diversified into tourism since 2001. While diversifying into tourism theoretically appears to spread financial risk it is nevertheless also subject to external forces beyond the control of the enterprise owner (e.g. reduced UK visitation following 9/11). The ability to absorb impacts, or resilience, is perhaps a good indicator of sustainability.

Most farmers in Dumfries & Galloway diversified into tourism in order to generate additional income and nearly half to make use of redundant cottages/buildings on the farm, conditions which can be attributed to agricultural restructuring and the post-productivist transition. In particular, the need to generate additional income can be viewed as a result of the reduction of state subsidies related to output (Sharpley and Vass, 2006), low agricultural returns and a lack of confidence in the government to support farming. Making use of redundant cottages/buildings on the farm, which can be viewed as both an economic and environmental reason for diversifying, is also contextualised within the post-productivist transition where a reduction in farm labour has resulted in surplus cottages and buildings.

## 6.4 Farm-based accommodation as a sustainable economic activity







### 6.4.1 *Employment and income*

In this section we assess one of the fundamental dimensions of sustainable tourism that of economic sustainability. In doing so, this research reports on two specific aspects namely direct employment and income. The term 'direct' is used here because although this study concentrates on direct employment it is acknowledged that the presence of farm-based accommodation enterprises may have employment multiplier effects beyond the farm gate (Slee *et al.*, 2001). Tourism is recognised as one of the most labour intensive industries and therefore can contribute towards sustainable rural development in terms of creating employment opportunities. This does not necessarily mean that tourism employment provides a high level of financial security. Furthermore, whilst there is often a high turnover of employees in tourism businesses (SPICe Briefing, 2002) this pattern is unlikely to affect most farm-based accommodation providers as will become evident. Nevertheless, Mitchell and Hall (2005) state there are over 2.5 million small- and medium-sized enterprises (SMEs) in Europe involved in the tourism industry and 81.5% of these fall into the micro category (i.e. employing up to 10 people) thus demonstrating the importance of tourism employment. 92% of all businesses in Dumfries & Galloway fall into the micro category.

Studies which comment on farm-based tourism employment suggest that it provides little in the way of employment opportunities outside the farming family (Hjalager, 1996). This study can confirm that this is also the case in Dumfries & Galloway where 78% of employees (including the owner) were found to be family members (sample = 54). This should not detract from the fact that these are employment opportunities which otherwise would not have been created if tourism was not adopted as a diversification strategy. All employment opportunities can be important in remote rural areas where few other employment prospects exist. A smaller proportion of farm accommodation enterprises provide work for two (9%) and three people (4%), although the jobs created typically involve cleaning duties on a part-time or informal basis. Research has indicated that farm-based B&B and caravan site operators tend to spend in excess of 35 hours per week devoted to the tourism

business which equates to full-time employment (JAEP, 1993 cited in Slee *et al.*, 2001). If such findings are indicative of farm-based accommodation provision in Dumfries & Galloway then approximately 110 full-time jobs are supported, but this does not necessarily mean that 110 full-time wages are generated by the tourism business.

**Table 6.4 Farm-based accommodation employment**

 The enterprise owner  Additional workers	Farm-based accommodation employment				N
					
Self-catering only	50%	41%	6%	3%	32
Bed & breakfast only	75%	17%	-	8%	12
Mixture of accommodation <sup>1</sup>	33%	33%	33%	-	9
Caravan/campsite only <sup>2</sup>	100%	-	-	-	1
<b>Combined total</b>	<b>54%</b>	<b>33%</b>	<b>9%</b>	<b>4%</b>	<b>54</b>

<sup>1</sup>Percentages do not add up due to rounding.

<sup>2</sup>Only one caravan/campsite business responded to the self-administered questionnaire therefore a note of caution is applied.

Table 6.4 provides a breakdown of employment across the different forms of farm accommodation found in Dumfries & Galloway. It was interesting to find that most farm-based B&B businesses generate employment for the business owner while a substantial proportion of self-catering businesses provide work for one other person usually off-spring or spouse. Recalling the average number of bed-spaces in each of these types of farm accommodation, these findings may suggest that  $\leq 6$  bed-spaces represent the threshold at which one person can manage the business efficiently. Caravan and camping have different labour requirements and owners are not required to clean mobile units.

The importance of flexible family labour in the survival of family farms has been documented in relation to agricultural duties (Burton, 2003) and it would appear that the significance of this labour source extends to the operation of tourism enterprises. However, where there is no additional family labour available to help with the tourism enterprise it can be difficult to recruit external help. Farmer J, a cattle and

sheep farmer operating a self-catering enterprise suggested the remoteness of her farm means that few people are willing to travel to help her. While the remoteness of the tourism enterprise may be highly valued by the consumer it can act as a barrier when trying to recruit help. Another interviewee, Farmer N, who operates a successful B&B on her 283 hectare organic farm, employs four people. She suggested that the recruitment of local labour did not work out since locals would not work Saturday and Sunday mornings "because they've got hangovers". This enterprise owner's search for "reliable" staff has resulted in the employment of two females from Slovakia and two from the Czech Republic. This enterprise represents one extreme of farm-based employment and it is far more common that enterprises support just the owner, and where there are other employees or helpers, these tend to be family members. While it is clear that farm-based accommodation providers are not a major generator of employment in Dumfries & Galloway it is important to reiterate that the self-employment and employment opportunities that have been created do contribute towards sustainable rural development.

In addition to creating some employment, an economically sustainable business is one that generates sufficient revenue to allow for maintenance of the activity and possible growth, however research elsewhere informs us that the contribution of farm tourism to total household income is typically low (Fennell and Weaver, 1997; Gössling and Mattsson, 2002; Nilsson, 2002; Oppermann, 1997). While generating regular income from the tourism enterprise is fundamental for economic sustainability it is also crucial to recognise that long-term economic sustainability can also be achieved through capital investment in properties. For example, the renovation of redundant cottages for tourism use adds to the total farm capital which may be released in the future. This was undoubtedly the view of Farmer E who received a 40% grant under the FBDS to renovate an ex-worker's cottage. Although her tourism enterprise contributes a significant 26-50% of total household income, she views the project as a long-term investment in property capital that can be withdrawn at a later date or inherited by her off-spring. Since the renovation her cottage has doubled in value. Under the conditions of the FBDS, businesses are monitored for the first five years, but after this time enterprise owners could potentially pull out of tourism provision and reap the financial benefits from selling



the renovated structure. However, many farmers interviewed and surveyed indicated that they wish to retain property within the family.

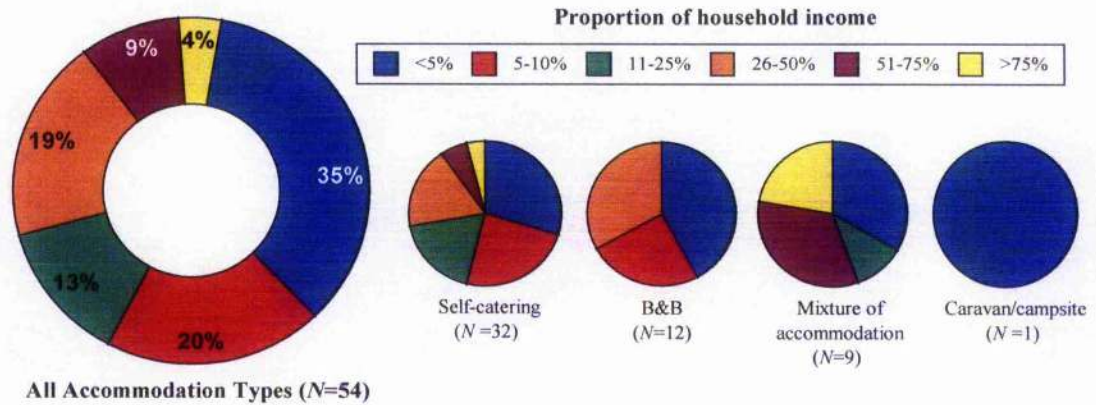
Replicating other findings elsewhere in Europe and the UK most farm-based accommodation businesses in Dumfries & Galloway generate 10% or less of total household income from tourism (Figure 6.3).<sup>68</sup> It is therefore understandable that enterprises tend to provide employment for the enterprise owner only. The proportion of household income derived from the tourism enterprise appears to be positively correlated with the number of bed-spaces. Therefore the more bed-spaces that are offered the greater the contribution to total household income.<sup>69</sup> Although there are exceptions, most farm-based enterprise has six or fewer bed-spaces, which is probably related to available resources on the farm. In terms of financial contribution, there is considerable variation across different forms of farm-based accommodation. It is interesting to find that operators with a mixture of accommodation tend to generate more household income from the tourism enterprise than any single form of accommodation. Perhaps this is the most economically sustainable strategy to adopt?

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<sup>68</sup> A Chi-square ( $\chi^2$ ) test, with all assumptions met, revealed a significant difference in the number of businesses and proportion of total household income from tourism ( $\chi^2 = 19.33$ ,  $df = 5$ ,  $p = 0.002$ ). This confirms the skewed distribution towards low proportional levels being the most frequent.

<sup>69</sup> Correlating the number of bed-spaces available and the proportion of total household income from tourism reveals a positive and significant relationship between the two variables which suggests, as the number of bed-spaces increases the higher the proportion of income from tourism increases (Kendall's tau-b non-parametric test,  $r = 0.514$ ,  $p = 0.00$ )

**Figure 6.3** Proportion of total farm household income from tourism accommodation



While the percentage of total household income from tourism is marginal in comparison to other sources of income, 76% felt it had been a good financial decision and a similar proportion were personally satisfied with choosing this diversification pathway in meeting financial difficulties. In most cases farm-based tourism does not transform the economic situation although one third of respondents in Dumfries & Galloway felt that the tourism enterprise has been essential in the survival of the farm, with a further 37% unsure if the farm would still be operating without tourism revenue. Farmer I, a B&B operator, notes how the economic importance of the tourism enterprise has changed:

“It used to be pocket money when we first started and now it is a big part of the income. We only have one room that sleeps up to five. Its full most of the time now, but it’s taken a few years to build up. It adds a lot to the farm income” (Farmer I)

For around 13% of respondents the revenue from the farm accommodation business is greater than the agricultural business, thus suggesting that income from farm tourism is not always of marginal importance and can be essential in farm household survival. One of the largest farm-based accommodation operatives in the region with 16 letting properties divulged:

“In the last two years 100% of our income has come from tourism because the farm has made nothing” (Farmer N).

Regardless of this Farmer N is still an active farmer with no intentions of giving up agriculture. For this enterprise owner farming is clearly much more than a capitalist venture - it is a way of life and cultural identity that he is loathed to give up entirely regardless of economic viability. Diversification into tourism can therefore play an important role in maintaining agricultural identity in Dumfries & Galloway.

In conclusion, although most farm accommodation enterprises appear to generate a relatively low proportion of household income from tourism it is clear that this revenue is personally and financially important, and together with the capital investment in property, it contributes to the long-term economic sustainability of the farming family. As for employment it is clear that the development of farm-based accommodation enterprises provide insignificant external opportunities outwith the farming family however it does contribute to economic sustainability by creating self-employment opportunities in remote areas where few other prospects exist. In this respect it can be considered ecologically-sustainable accommodation under Moscardo et al's (1996) criteria. Overall, farm-based accommodation development is perhaps unlikely to transform the economic situation in Dumfries & Galloway although it can play a fundamental financial role at the household level. An analysis of the economic benefits beyond the farm gate, generated by visitors staying in farm accommodation, would be a useful line of enquiry for future research.

#### *6.4.2 Sustainable business goals of farm-based accommodation providers*

One of the main conditions when seeking grant assistance under the FBDS is that a five-year business plan is submitted. Prepared by an independent consultant<sup>70</sup>, this document is beneficial for comprehending what the business can realistically achieve and directing the sustainable development of the tourism enterprise, as indicated earlier by Farmer K (p.168). However, few farmers in this research used grant

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<sup>70</sup> Unless the estimated cost of the work included is less than £10,000 (Scottish Executive, 2005).

support when diversifying into tourism, therefore it is of interest to ascertain whether the identification of clear business goals plays a role in the tourism operator's decision-making process. With reference to rural tourism in general "there has been a tendency for businesses to develop in an *ad hoc* manner, with little or no meaningful strategy addressing the issue of sustainability" (Mitchell and Hall, 2005: 3). These commentators go on to list some structural and product problems facing rural tourism providers including: lack of concern with and knowledge of demand factors; lack of skill with regard to product presentation; and, limited knowledge of the markets they work within (Mitchell and Hall, 2005). These are given some consideration in the later section addressing social sustainability.

Farm-based accommodation operators in Dumfries & Galloway were asked to identify their three main business goals. This generated a substantial list and the top ten most frequently cited goals are presented in Table 6.5.

**Table 6.5 Top business goals of farm-based accommodation providers**

	(N = 54)
Increase profits or make money	76%
Increase or exceed customer satisfaction levels	24%
To provide or enhance the quality of the facilities to visitors	22%
To expand the accommodation business	16%
Maintain property	16%
To increase occupancy levels	12%
To promote the local area	7%
To enjoy myself	7%
To meet people	6%
To develop a marketing strategy	3%

By far the most frequently cited business goal was to 'increase profits or make money' which is not surprising given the main reason farmers diversify into tourism. 12% mentioned that increasing occupancy levels was one of their top three business goals, although only two participants provided specific and measurable targets. Despite the unrealistic nature of the economic goal, one participant who operates a farm-based B&B aims 'to fill the house 52 weeks a year'. A more focused and

realistic business goal disclosed by one participant who received grant aid under the FBDS was 'to gain maximum income from the cottage by expanding use to 30 weeks per year'.

It is evident that most farm-based accommodation businesses do not set specific business goals and this reflects Mitchell and Hall's observation that most farm tourism businesses have developed in an *ad hoc* manner. Participants who noted they received funding through the FBDS gave more specific business goals such as 'identify our target customers and meet their needs', 'develop wildlife side of the business' and 'develop our website' whereas those without formal plans articulated generic goals such as 'to make money'. Having a sustainable business strategy and specific business goals counteracts some of the structural and product problems that may exist (Mitchell and Hall, 2005) therefore making the business more likely to be sustainable in the long-term. For example, the business plan submitted for the FBDS should identify the training needs of the operator and requires an understanding of the markets within which the proposed tourism enterprise will operate (Scottish Executive, 2005). A Project Assessment Committee (PAC) consisting of various stakeholders including SHERAD, VisitScotland Dumfries & Galloway, SNH and the local enterprise company are able to assess business plans submitted by FBDS applicants and offer advice in achieving sustainable business goals.

For those farmers that do not meet the criteria for grant assistance or are refused grant support advice is also available. The development agency in Scotland, Scottish Enterprise, can also help businesses develop a business strategy and identify and address training needs although just 22% of respondents used advice from this source when deciding to diversify into tourism (sample = 60). One respondent noted that 'Scottish Enterprise was very supportive' and they 'helped to specify the needs of the tourists'. However other interviewees held a perception that Scottish Enterprise were not interested in small businesses and only help businesses that create numerous jobs. In an interview with a representative from Scottish Enterprise Dumfries & Galloway (SEDG) it was acknowledged that creating employment opportunities was a priority but sole proprietors were also given support. When asked how Scottish Enterprise helps sole proprietors to increase their environmental sustainability the tourism representative from SEDG could only give examples from larger businesses that

have received grants for solar panels. It became clear that sole proprietors probably do receive less attention despite the fact that collectively their economic and environmental impact may be considerable.

A slightly higher proportion (28%) contacted the local tourist board for advice when starting their farm tourism enterprise, although one farmer suggested that they “nearly caused me to give up before I started” (Farmer I) mainly because of all the business regulations, but also because of a negative attitude. It is evident that there are mixed feelings about the perceived helpfulness of some economic agencies when starting a small-scale farm accommodation business. Several interviewees praised the Scottish Agricultural College (SAC) farm diversification website as a valued resource when planning their diversification.<sup>71</sup> This comprehensive source of information was considered trustworthy and helpful in planning what strategy to adopt.

In addition to the self-reported business goals, questionnaire participants were also asked to indicate the importance of other goals pertaining to the operation of the tourism business (Table 6.6). What is evident is that the tourism enterprise is not just a capital investment in property but is viewed as a business that needs to be economically sustainable. One farmer noted that she would turn her back on any business that did not pay, and with reference to her farming business she suggested “at the moment it is looking extremely frightening” (Farmer C). According to Table 6.6 social aspects of the business appear less important than economic sustainability. In this respect farm-based accommodation owners differ from many other rural tourism business owners where creating an enjoyable lifestyle has been identified as a key social goal (Getz and Carlsen, 2000). Despite generating a marginal proportion of household income from the enterprise most participants appear to be quite ambitious about their accommodation enterprise. This is reflected in the high number aiming to keep the business growing, although some farmers are aware of the dichotomy of further expansion:

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<sup>71</sup> [www.sac.ac.uk/consultancy/farmdiversification/](http://www.sac.ac.uk/consultancy/farmdiversification/)

“I don’t want to be part of the problem of swamping the area with holiday cottages. And I think people come to our holiday cottages to feel special and isolated and I think you could lose that with more tourism” (Farmer C).

Located within a nine-mile radius of Castle Douglas and within a three-mile radius encompassing seven other farm-based accommodation providers, Farmer C evidently views the current provision of facilities as adequate. Believing the elements that make farm accommodation special to visitors (remoteness, peace and quiet, uniqueness) could be lost if more development takes place she expresses an ethical position in line with sustainable tourism philosophy that acknowledges there are limits to growth. One recent report indicated that some areas of Dumfries & Galloway, around Fleet Valley NSA, Castle Douglas and East Stewarty Coast NSA, have up to 20% of accommodation stock in tourism lets or as second homes (Communities Scotland, 2005) some of which will be farm-based accommodation. It is estimated that Dumfries & Galloway has over 1,000 second or holiday homes. The Communities Scotland research has indicated that tourism holiday lets are generally viewed by residents as being more positive due to the wider economic benefits to rural communities. Nevertheless this does raise questions over the social sustainability of self-catering where it removes much needed housing in rural areas from the market. There is no indication at the present moment that this is a major issue in Dumfries & Galloway although it is a situation that needs monitoring if the region is to strive towards sustainable tourism development and meet the needs of local communities.

Realising the growth potential of the enterprise could however be a problem for many farm-based accommodation providers given that this requires investment and the income generated from tourism is low. A worthwhile subject for future research would be the investigation of growth ambition over time. Are new businesses more growth ambitious than older ones? Does ambition decline over time, perhaps with the realisation that tourism revenue is low on farms? What are the barriers to future growth on farms? There are, of course, practical and regulatory restraints from expanding a business in a rural location, most notably the planning system, but there may be more social reasons, even perhaps a fear of growth that prohibits enterprise

owners from expanding. Of course some enterprise owners may be perfectly happy with the size of the current business (lifestylers), although as indicated in Table 6.6 many farm enterprise owners aim to keep their business growing.

**Table 6.6 Goals pertaining to the operation of the tourism business**

(N = 54)	Strongly Agree				Strongly Disagree
It is crucial to keep the business profitable	76%	6%	11%	0%	7%
I want to keep the business growing	39%	15%	33%	11%	2%
Enjoying the job is more important than making lots of money	31%	22%	33%	7%	6%
This business currently meets my performance targets	19%	22%	41%	11%	7%
My personal/ family interests take priority over running the business	35%	24%	26%	7%	7%
I want to present a good public/corporate image	48%	20%	15%	9%	7%
Delivery of a high-quality product or service is a high priority	80%	7%	7%	2%	4%

Table 6.6 suggests that the performance targets of many enterprises are not being met which may in part reflect the earlier finding that most enterprise owners do not have a formal sustainable business strategy or specific goals from which to measure performance targets. It is clearly important to most farm-based accommodation providers that their enterprise is professional and presented well as indicated in the above table, but this may prove problematic for those farmers that have little understanding of tourism or develop the enterprise without a clear strategy. Most striking is the very high proportion of enterprise owners striving to create a quality product, a finding also evident from the three main business goals (Table 6.5) and this confirms a customer focus considered essential for sustainable tourism development (Youell and Wornell, 2005). As will be discussed more fully in a later section, farm-based enterprise owners in the study region believe that it is the quality of the accommodation, above all else, that is fundamental in attracting visitors and sustaining their farm-based accommodation business:

“Tourists are looking for quality of accommodation. The public don’t look at it now as just somewhere cheap to go and if you have a B&B now I think you have to run it as a business. I think the days of running it for



pocket money have gone. The public have very high expectations. They are not happy with just a little room” (Farmer N)

This research confirms that many farm-based tourism enterprises are not operating with an efficient sustainable business model. This leads to the conclusion that much farm-based accommodation in the study region has developed in an *ad hoc* manner. This may be problematic for the viability of some enterprises where there is a lack of concern and knowledge of demand factors along with a lack of skills and knowledge of the markets they work within. This could prevent some accommodation providers from achieving the main business goal of increasing profits and making money. It also raises questions about the long-term viability of tourism as a diversification strategy and as a means for increasing rural sustainability.

#### 6.4.3 Sustainability and networking

Analysts have argued that farm tourism sustainability will benefit if “individual farms join national marketing organisations for farm tourism, such as the FHB [Farm Stay UK] for accommodation. Such organisations offer both national and locally-based support in training and marketing, and their systems of membership acceptance offer quality assurance to the market” (Clarke, 1996a:25). Networks, described as “a specific type of relation linking a set of persons, objects or events” (Knoke and Kuklinski, 1983: 12) can help to sustain farm accommodation providers economically and socially by reducing provider isolation, pooling resources, enhancing social capital, and helping to strengthen the farm product through effective marketing. Networks can help to establish an identity for a collection of related businesses who individually may struggle to find their market. Additionally, networks and cooperation may increase the power of small businesses by acting as one group whilst representing a range of different businesses. In other words, a strong network of farm accommodation businesses could enhance ‘stakeholder’ status.

Arguably the most important, and certainly the largest network of farm-based accommodation in the United Kingdom is 'Farm Stay UK' (Sharpley and Vass, 2006). The purpose of this farmer owned consortium is:

1. To promote the concept of farm tourism in the UK;
2. To help members expand their businesses through pro-active marketing/sales support, and;
3. To assist farmers in broadening their income base through diversification.

In addition to networking and promotion at the national scale Farm Stay UK has regional networks organised into ninety-four groups across the UK where members meet to discuss issues. In 2005 Farm Stay UK listed over one thousand farm accommodation businesses although just seventy are located in Scotland. In Dumfries & Galloway the Farm Stay UK network plays an insignificant role in the sustainable business development of farm accommodation enterprises with only two enterprises listed, one of which is not a working farm and therefore not considered here to be farm-based tourism. There are several reasons why farm tourism owners in the study region are not members of this network. One interviewee who used to be a member of this network withdrew because of high joining fees, a reason why many farm-based accommodation providers are not members of other schemes or utilise available services. Another interviewee associated the Farm Stay UK network more with England and therefore had not considered joining this network. So what other networks operate in Scotland to help sustain the business development of farm-based accommodation providers?

One organisation that networks farm-based B&Bs at the national scale in Scotland is 'Farmhouse Bed and Breakfast'. Although it links enterprises it is more of a promotional service than a pro-active organisation looking after the interests of members. Unlike Farm Stay UK it does not have regional groups that meet nor does it embark on national marketing campaigns or conduct research. There are only fifty businesses in Scotland listed, five of which are located in the study region. Other similar networks include 'Organic Holidays', a global network of organic farms offering accommodation or utilising organic produce. Over one hundred businesses are listed in Scotland, ten in the study region. Again this is mainly a promotional

service where members are networked on the basis of their commitment to organic production methods or use of organic produce. Another network identified that specifically promotes farm-based accommodation in Dumfries & Galloway is 'Quality Farmhouse Holidays'. Although this network has been in operation since 1987 it has been relatively unsuccessful in attracting accommodation providers from this region with only eight current members.

The largest single network of farm-based accommodation providers in Scotland and in Dumfries & Galloway is maintained through VisitScotland.com, the promotional arm of VisitScotland. This organisation promotes all types of accommodation across rural and urban Scotland and has recently created an individual identity for farm-based accommodation. This suggests that they view this as a distinct form of rural tourism. The VisitScotland.com 'Stay on a Farm' webpage provides the following introduction:

"If you're keen to get away from it all and fancy something just that little bit different, why not try staying on a farm? There are lots of working farms across Scotland offering either B&B or self-catering facilities where you'll be able to enjoy really comfortable accommodation of a very high standard, often in a building of great character"

([www.visitscotland.com/accommodation/stayonafarm](http://www.visitscotland.com/accommodation/stayonafarm))

Across Scotland ninety-seven B&Bs are listed under 'Stay on a Farm', fifteen of which are found in Dumfries & Galloway. The site also lists one hundred and thirty-two farm-based self-catering businesses and forty-one of these are found in the study region. Therefore Dumfries & Galloway hosts a significant share of all farm-based accommodation in Scotland (25%). While the 'Stay on the Farm' webpage is essentially a promotional network it does marginally strengthen the identity of farm-based tourism as a distinct form of rural tourism at the national level. It pulls similar businesses together giving consumers the opportunity to identify farm accommodation, although it does not appear to have any other function beyond this segmentation exercise.

Only businesses that are Quality Assured through VisitScotland are promoted through 'Stay on a Farm' and this means that 34% of identified farm accommodation businesses in the study region are not represented. A number of interviewees were extremely critical of VisitScotland.com, a Public Private Partnership (PPP) operated by eTourism Ltd. and established in 2002, suggesting that their service is poor and fees too expensive. VisitScotland.com operates a centralised booking system where a 10% fee is charged for every booking made. Farmer N was particularly unhappy with the fees and suggested that she, and others, would not be advertising their farm-based services through VisitScotland.com:

"We've [referring to a group of accommodation providers in Dumfries & Galloway] all refused to sign up and it will be interesting to see what happens. My guests are all horrified at the whole concept; they won't phone a call-centre...The other major thing is the fact that they are taking 10% of the total booking. I know a lady who came to stay who is very much involved in the hotel industry worldwide, she's a consultant for the Spanish government now, and she told me that 1.5% in Europe is the norm, 3% if your turnover is in excess of four million, and 1% in America. Nobody will pay a travel agent more than 1% in America...Some small B&Bs live on their 10% deposits during the months when they are not busy" (Farmer N).

Accommodation enterprises in Dumfries & Galloway have been proactive in campaigning against the new centralised VisitScotland.com. One reaction has been the establishment of a new network and organisation (Association of Dumfries & Galloway Accommodation Providers (ADGAP)). ADGAP is an authentic 'grass-roots' effort operated and controlled by accommodation providers, including some of the interviewees and questionnaire respondents in this research. The website provides listings of members and direct contact details along with service details.<sup>72</sup> No booking fees are charged. Although not exclusively farm-based, many of the one hundred and eighteen members are farmers and the organisation was founded by a farm-based accommodation operator. Another website developed by ADGAP under

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<sup>72</sup>[www.visitsouthwestscotland.com/index.asp](http://www.visitsouthwestscotland.com/index.asp)

the banner of 'Reclaim VS.com' has been launched and puts forward an argument against VisitScotland.com. At the time of writing, a petition was being developed that will be submitted to the Scottish Parliament urging "the Scottish Executive to return the national tourism website, call centre & booking system to public ownership".<sup>73</sup> Over six hundred and ninety signatures from businesses and stakeholders across Scotland (and England) have been submitted to date. It is important to note that despite this grass-roots reaction against VisitScotland.com many enterprise owners still value being quality assured under VisitScotland. The argument is not the abolition of VisitScotland but the PPP.

With the exception of VisitScotland.com's national network, this research has shown that relatively few exclusive farm accommodation networks operate in the region. The networks that do exist including 'Stay on a Farm' are promotional tools and do little to create a brand identity or strengthen the product through effective marketing. So does a lack of networking among farm accommodation providers in Dumfries & Galloway impact on sustainability? One might look to certain regions of England to help with this question.

In marked contrast to Dumfries & Galloway, some regions in England have farm accommodation network organisations that have been successful in creating a strong brand identity and have been pro-active in supporting farmers in the diversification process by providing advice and market research. For example, in south-west England a consortium of farmers trading under the banner of 'Cartwheel' has been successful in securing European funding through Objective 1 to "enable farmers to become more professional in their marketing activities in order to secure and sustain new business".<sup>74</sup> In 2001, Cartwheel provided support to farms affected by the FMD epidemic and organised a range of events aimed at rural recovery and bringing people back to the south west.<sup>75</sup> In 2005, it was estimated by Cartwheel that their

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<sup>73</sup> [http://cpetitions.scottish.parliament.uk/view\\_petition.asp?PetitionID=122](http://cpetitions.scottish.parliament.uk/view_petition.asp?PetitionID=122)

<sup>74</sup> [www.farmtourism.co.uk/news\\_marketing.asp](http://www.farmtourism.co.uk/news_marketing.asp)

Cornwall and the Isles of Scilly have been designated by the European Commission as an Objective 1 area because its economy is lagging behind the European average. The aim of Objective 1 is to provide assistance in regenerating the economy, thereby increasing the area's wealth. The programme runs from 2000 to the end of 2006. The European grant is matched from UK public and private sources.

<sup>75</sup> [www.farmtourism.co.uk/history.asp](http://www.farmtourism.co.uk/history.asp)

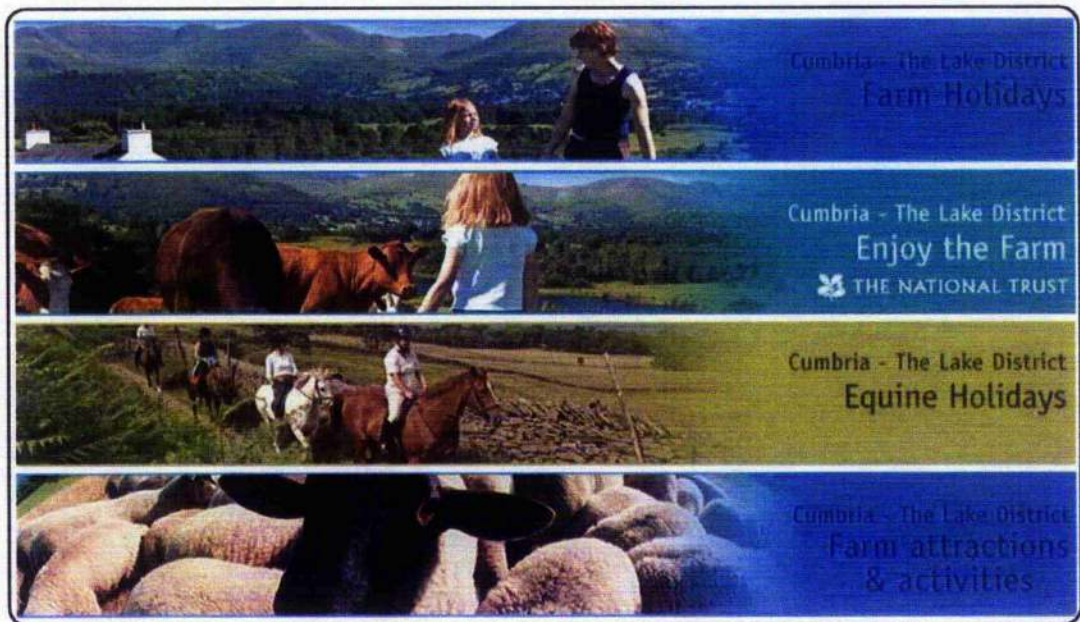
website generated £13.1 million in new business for the south-west of England. This organisation also commissions market research in order to benefit and support its 200 members.

Another example of a successful farm-based tourism network organisation is the North West Farm Tourism Initiative (NWFTI) which was established in 2002 following the FMD epidemic with funding support through Objective 5b and the North West Regional Development Agency.<sup>76</sup> The four-year project aims to create an exclusive North West Farm Tourism brand, offering assistance to rural businesses with marketing and training and helping to develop and strengthen farm tourism in the region. The scheme aims to benefit farmers who have existing tourism businesses and wish to improve them or help those who wish to diversify into tourism. The NWFTI has a dedicated website providing a range of information from case studies of successful farm accommodation providers to recent research on potential markets. There is also a facility where farm-based tourism providers can exchange ideas and talk to other registered participants in the network.<sup>77</sup> The NWFTI also run exchange visits to similar businesses in different locations and development days where accommodation providers and other farm-based tourism businesses can develop their skills and gain new ideas. In conjunction with the NWFTI, Cumbria Tourist Board has embarked on a marketing campaign promoting farm-based tourism in the region. Four dedicated farm tourism websites, typically depicting the rural idyll, have been created and the tourist board have promoted these through TV adverts and national press (Plate 6.1).

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<sup>76</sup> In 1994, six areas in England, three areas of Scotland (including Dumfries & Galloway) and rural Wales were awarded 'Objective 5b' status by the European Commission. This designation was given to rural areas throughout the European Union (EU) whose economic development was lagging behind the EU average in terms of income and employment. The Objective 5b Programme provides additional funds for a wide variety of activities with the aim of moving these regions towards a range of targets. These include raising income per head, lowering unemployment, increasing the number of jobs and businesses and boosting wages.

<sup>77</sup> <http://nwfarmtourism-initiative.org.uk/index.htm>



(Image sources: [www.golakes.co.uk](http://www.golakes.co.uk))

**Plate 6.1** Cumbria Tourist Board farm-based tourism websites

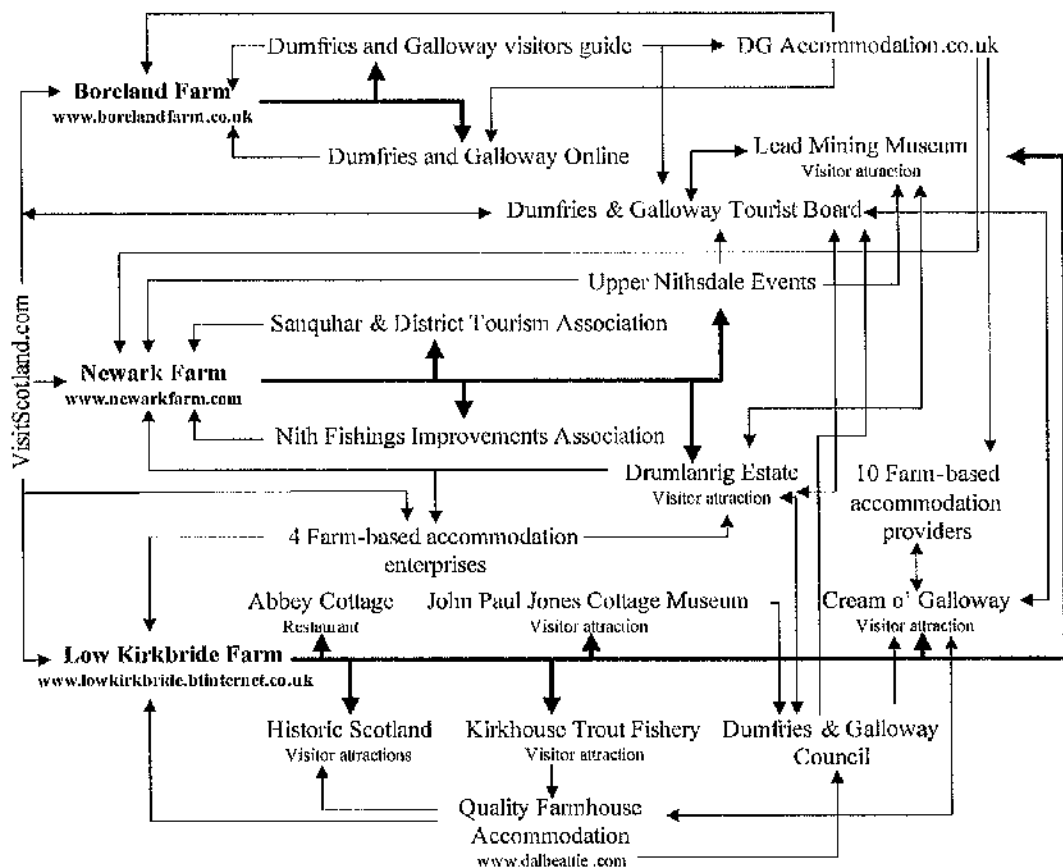
Lessons can be learned from these successful networks, and much can be gained from creating a similar sustainable model in Dumfries & Galloway. It is clear that farm-based accommodation businesses in the study region have nothing like these models which have proven to help economic and social sustainability where they are present. The networks in the north-west and south-west of England are partly successful because there is support from the enterprise owners, the regional tourist boards, development agencies and a range of other stakeholders. The need for a more sustainable focus on farm tourism in these case studies has come from the grass-roots, the enterprise owners and farmers, and following sustainable development and Agenda 21 principles this would also need to be the case in Dumfries & Galloway. This is achievable, as in the case of ADGAP, however further research in the region would help establish if enterprise owners would be in favour of creating a specific single brand identity and network. As well as gaining stakeholder support one of the main challenges would be funding the development of a network.<sup>78</sup>

<sup>78</sup> "The VisitScotland Challenge Fund is a project part-financed by the European Union, designed to assist collaborative group marketing projects that attract more visitors to Scotland and make it easier for them to book their visit.

#### 6.4.4 Sustainability and business promotion

Having discussed the lack of farm-based tourism networking in Dumfries & Galloway and suggested that economic and social sustainability could be enhanced in the region through adopting a similar model to those highlighted, attention now turns to farm-based accommodation promotion. Although there is no specific and effective networking organisation linking and promoting the interests of farm accommodation providers, business owners do make use of a number of promotional sources that connect enterprises with attractions and other services in a complex network throughout the region. Figure 6.4 demonstrates some of these connections using three farm-based accommodation enterprises. The thick lines emanating from each enterprise show the web links to other enterprises and services, the arrows show the direction of the links.

**Figure 6.4 Promotional networks of farm-based accommodation**





Although the networks in Figure 6.4 are by no means complete, it demonstrates the complexity of connections between different enterprises. It shows how visitor attractions and accommodation enterprises benefit mutually through promotion and can therefore enhance economic sustainability. The farm accommodation providing the greatest number of links to other services (Low Kirkbride Farm) does not gain as much promotional benefit in comparison to the other two farm accommodation enterprises as indicated by return arrows. This is because of their choice of links and lack of connections with websites that specifically promote accommodation. Newark Farm appears to gain the most reciprocal promotion through the links on their website. Within the promotional network presented above two visitor attractions in particular appear to benefit. The Lead Mining Museum in Wanlockhead is promoted by various sources although none of the accommodation enterprises are promoted on their website. However the popular Cream o' Galloway attraction near Gatehouse of Fleet provides links to ten farm-based accommodation providers in the area and these in turn also promote this visitor attraction. Promotional networks like these are clearly fundamental for increasing the sustainability of farm-based accommodation providers and other tourism businesses in the region.

Farm-based accommodation providers in Dumfries & Galloway also make use of a number of other promotional media (Table 6.7).

**Table 6.7 Promotional media used**

	Accommodation providers (N = 60)	Accommodation consumers (N = 121)
None	5%	11%
VisitScotland.com	72%	3%
Magazines/Brochures/Fliers	55%	32%
Internet	75%	29%
Tourist Information Centre	73%	21%
Other	10%	9%

The above table shows that 5% of farm-based accommodation providers claimed they never use any forms of promotional media which would appear unsustainable given that consumers need to source products. This said, 11% of consumers never

used any promotional media in finding their farm accommodation except roadside adverts. 72% of the accommodation providers suggested they utilised the services of VisitScotland.com; however it is clear that this is unpopular with consumers. This indicates that the 'Stay on a Farm' webpage is ineffective in generating business for farm-based accommodation providers in the region. Consumers in this research appear to use magazines/brochures/fliers more than any other form of media when choosing their accommodation, a surprising finding given that the internet and other ITC are thought to be more important in reaching consumers (Scottish Executive, 2006a). Over half the accommodation providers in the study region, and most enterprises in England and Wales (Evans and Ilbery, 1992b), use magazines/brochures/fliers. In Dumfries & Galloway these included official VisitScotland publications, RAC guidebook, the RSPB magazine 'Birds', the Farm Stay UK publication 'Stay on a Farm', and the 'Shooting Times'. A high proportion of farm-based accommodation enterprises do advertise their services via the internet and 44% have their own website. The high use of the internet among farm accommodation providers indicates that many have made the technological transition and can now reach a global market, however it was surprising that less than a third of consumers in this sample used this source when choosing their accommodation. Further analysis reveals statistically significant differences with regards to age of consumers and the use of the internet to source farm accommodation.<sup>79</sup> Around two-thirds of consumers under the age of forty used the internet to source farm accommodation while 72% of 40-54 year olds and 91% of >55 year olds did not use the internet. Given that 78% of all farm-based accommodation consumers sampled were over forty years old this helps to explain why such a low proportion appear to have used the internet when sourcing their accommodation. Despite finding a low internet use among consumers in this study the Scottish Executive (2006a) maintain that the internet and ITC are increasingly important for consumers sourcing and booking accommodation. The websites that farm-based enterprises use to advertise their products are shown in Table 6.8.

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<sup>79</sup> Chi-square test:  $\chi^2 = 25.367$ ,  $df = 3$ ,  $p = 0.00$ .

**Table 6.8 Websites used by farm-based accommodation enterprises**

<b>International organisations (number)</b>
Organic Holidays.com (2)
Welcome Cottages.com (1)
<b>National organisations</b>
VisitScotland.com (39)
Discover Scotland.com/GM Thomson (9)
Smoothhound.co.uk (3)
Stilwells.co.uk (2)
Association of Scotland's Self Caterers. www.assc.co.uk (2)
Pets Welcome (2)
Farmhouse Bed and Breakfast.co.uk (2)
Farm Stay UK.co.uk (1)
Blakes.co.uk (1)
UK Holiday Cottages Online. www.oas.co.uk (1)
Country Holidays.co.uk (1)
Holiday UK.co.uk (1)
Scottish Farmhouse Holidays. www.scotfarmhols.com (1)
The AA. www.theaa.com (1)
<b>Regional organisations</b>
Own website (24)
Dumfries & Galloway Organic Network. www.dg-organic.net (3)
Southern Upland Way.com (3)
Quality Farmhouse Holidays. www.dalbeattie.com (2)
Langholm – Online.co.uk (2)
DG Visitor.co.uk (2)
Annan Online. www.annan.org.uk (1)
Sanquhar and District Tourism Association. www.sadta.org (1)

The table above shows that VisitScotland.com is the most widely used national website for accommodation providers followed by 'Discover Scotland', a Castle Douglas based booking agent. Given that >30% of farm accommodation businesses are located within a twelve-mile radius of Castle Douglas (see Figure 6.1) it is perhaps unsurprising that this letting agency is used by several farm accommodation owners. Most enterprise owners use multiple sources of internet promotion, for example the VisitScotland.com website and local websites. One of the largest farm-based accommodation providers in the region advertises in numerous different magazines but this is beyond the financial resources of most farm-based enterprises:

“We’ve had a website for four years and that’s been very successful. We get quite a lot of business through Dumfries and Galloway Tourist Board; we get a lot of word of mouth and referrals, friends, relatives and that sort

of thing. We advertise in a few publications like 'Dogs Monthly', and 'Pets Welcome'. We're doing a fair bit of advertising through the disabled network, because we have three places that are disabled converted, we see that as a big market" (Farmer N).

Several enterprise owners noted that 'word of mouth' was important in gaining custom, this has been recognised in other research elsewhere (Clarke, 1996a; Sharpley and Vass, 2006), however it is not adequate on its own and formal advertising still needs to be pursued. This clearly has a cost and may be difficult for some enterprises generating low levels of income. Developing and maintaining one's own website is perhaps the most efficient way of promoting the tourism enterprise however this will require developing new skills, an issue discussed in a later section with regards to social sustainability.

The economic sustainability of farm-based accommodation businesses is enhanced through promotional networking yet there is an absence of a distinctive organisation that could help in promoting the specific interests of farm-based accommodation providers in the region. The benefits from establishing such a body in Dumfries & Galloway is evident from the case studies in England and it is foreseeable that economic and social sustainability could be further increased.

## **6.5 Farm-based accommodation and environmental sustainability**

### *6.5.1 Environmentally sustainable practices*

The economic and social sustainability of rural tourism is interdependent with environmental sustainability (Lane, 1994b) because it is the scenery, landscape, heritage and the by-products of these, such as perceived tranquillity, that attract visitors in the first place. Furthermore, it was argued at the outset of this thesis that consumers are becoming increasingly aware of environmental issues surrounding the products they purchase. In fact, 71% of farm-based accommodation users in this research (N=122) felt it was either 'very important' or 'important' that their accommodation was 'environmentally friendly'. In addition it was revealed in

Chapter Five that most visitors to Dumfries & Galloway express pro-ecological attitudes and therefore it is important that suppliers of tourism experiences, including accommodation providers, take account of their own environmental impact. However, achieving environmental sustainability may be difficult for small enterprises that lack the skills, knowledge and resources (Berry and Ladkin, 1997), and for some businesses survival may be considered more important than sustainable tourism practices (Carlsen *et al.*, 2001). Many farmers in Dumfries & Galloway who have diversified into tourism have contributed towards environmental sustainability without recognising this achievement. For example, the recycling and renovation of redundant farm buildings for tourism purposes makes use of significant reserves of embodied energy and therefore contributes towards environmentally benign and sustainable rural development in this way (Simpson and Brown Architects, 2001). In this respect farm accommodation development can help to protect built heritage by ensuring its long-term viability. It therefore merits classification as ecologically-sustainable accommodation and specialist accommodation (Moscardo *et al.*, 1996).

Clarke (1996a:25) believes that farm tourism of the future will profit if it “strengthens its identity with the ‘environmentally responsible’ position” and suggests “Farm tourism should have an advantage in this respect over other tourism enterprises by the very nature of its product”. The “very nature” of the farm-based tourism that Clarke refers to includes the location of enterprises within a relatively unmodified environmentally attractive rural setting. Around 40% of farm-based accommodation enterprises in this sample (N = 60) are located on land managed under the Environmentally Sensitive Areas (ESAs) scheme, a designation that aims to protect the environment from potentially damaging farming operations. Clarke may also be referring to the small-scale of most enterprises, the retention of income and integration within the local economy, and the low environmental impact in comparison to large accommodation businesses such as hotels.

In this section we consider the environmental sustainability of farm-based accommodation providers in Dumfries & Galloway, starting by considering membership of the Green Tourism Business Scheme (GTBS). The need for this research stems from the observation that little has been documented on the environmental credentials of small-scale rural tourism enterprises (Carlsen *et al.*,

2001; Denman, 1994b) and that environmental sustainability is a key dimension within the holistic concept of sustainable development.

To recap, the GTBS is an accreditation scheme operated by VisitScotland that encourages accommodation providers and other sectors of the tourism system to reduce their negative environmental impact by adopting a range of environmental management procedures. The GTBS has recently been rolled out in England, although most of the five hundred participants are in Scotland. For those participating in the scheme, an initial environmental audit of the accommodation business is undertaken by consultants and based on the results, the enterprise is awarded one of three levels: bronze, silver or gold. While this accreditation scheme is aimed primarily at increasing environmental sustainability it also incorporates social and economic dimensions. For instance, scheme participants are encouraged to purchase local goods and services thus helping to sustain the wider community economically while at the same time reducing environmental impacts overall. The GTBS is also promoted as a tool for saving money by reducing resource consumption and waste thus it can also help to increase the profits of enterprise owners.

At the time of writing only twenty-nine businesses in Dumfries & Galloway were members of the GTBS, under half of which are accommodation enterprises.<sup>80</sup> The low level of environmental management among farm-based accommodation providers is evident from the finding that only one farm-based B&B business is a member. Despite being lauded as one of the best known environmental management schemes in Europe (Leslie, 2001) it is apparent that the uptake of the GTBS is extremely low and this represents a significant challenge for enhancing the environmental sustainability of the tourism supply.

The farm-based accommodation provider in Dumfries & Galloway with the GTBS award has achieved the bronze level, and her reasons for joining the scheme were simply because "I like being green" (Farmer G). One other interviewee used to be a member of the scheme but pulled-out because she felt participation was not bringing

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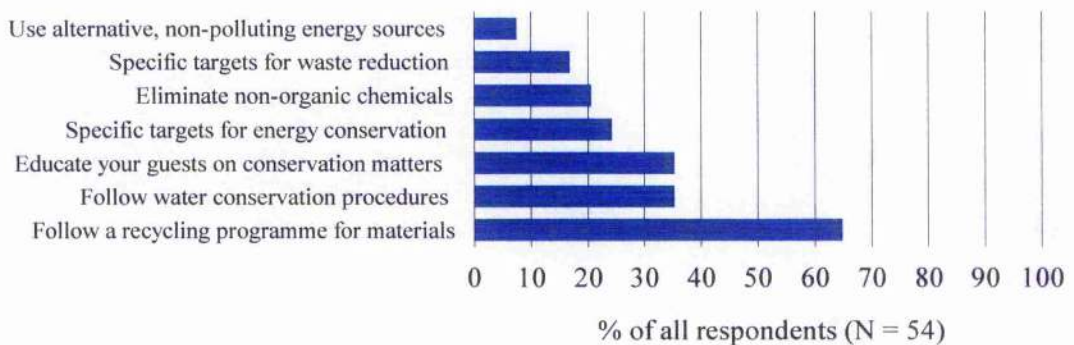
<sup>80</sup> The remainder being visitor attractions which are also eligible to join the scheme.

any more customers and therefore she could not justify the cost of joining the GTBS, although she did concede that:

“It’s becoming more popular for people to go on holiday to an environmentally friendly place” (Farmer C).

Farmer C noted that she may join the GTBS in the future but at the moment she is not a member of VisitScotland’s Quality Assurance scheme which omits her from participating in the GTBS. This Farmer also made the important point that “You can be environmentally friendly and not be part of the scheme”, and this is why the present research also asked farm-based accommodation providers to indicate if they pursued any of the environmental practices shown in Figure 6.5.

**Figure 6.5 Environmental practices of farm-based accommodation operators**



Despite the finding that only one farm-based accommodation provider is a member of the GTBS, it is evident that many more engage in environmental practices and consequently this sector of rural tourism is not as environmentally unsustainable as it would first appear. Of considerable note is the high level of engagement in recycling activities. Since agriculture is a voracious consumer of water it is perhaps unsurprising that over one third of respondents follow water conservation procedures. The elimination of non-organic chemicals probably reflects the finding that a similar percentage of enterprises are located on organic farms. A review of farm-based accommodation websites in the region reveals that no enterprise owners advertise their environmental commitment, not even the member of the GTBS. This

prohibits the sector from attracting the environmentally conscious visitor that Chapter Five has exposed. Short interviews with eleven visitors staying in farm-based accommodation in the study region revealed that nine would choose environmentally friendly accommodation over other forms even if it was slightly more expensive but this should not be at the expense of quality. However, nearly all interviewees were quick to point out that they would have difficulty in finding environmental information about an enterprise in order to make an informed decision. Some of the comments include:

“I don’t know if there are any environmentally friendly places to stay, but I’m very keen on environmentally friendly things” (Farm accommodation user 1)

“It would be difficult to tell if it was more environmentally friendly, unless it was advertised as being environmentally friendly” (Farm accommodation user 2)

“I would always try to go for the [accommodation] with the higher environmental standard, but most of the places I’ve stayed don’t say one thing or the other. I think it’s becoming increasingly important that we care for the environment” (Farm accommodation user 3)

“We would choose [the accommodation] with the higher environmental standard, but how would we know that would be the case? There is very little information on that sort of thing!” (Farm accommodation user 4)

These comments may provide an incentive for accommodation providers to further consider their environmental impact and adopt more sustainable practices. However this is only likely to happen where economic (competitive advantage, market advantage, cost savings) and environmental benefits can be demonstrated or if the enterprise owner, like Farmer G above, holds a sympathetic conservation ethic that stimulates exploration of best environmental practice (Carter *et al.*, 2004). One other way of increasing environmental stewardship is through regulation rather than a voluntary approach. Farmers are already subjected to various environmental



regulations as conditions of the Single Farm Payment scheme and also through participation in agri-environmental schemes (see Box 6.1) and are therefore already accustomed to this approach.

#### **Box 6.1      New agricultural policy and environmental sustainability**

The recent Common Agricultural Policy (CAP) reforms and the introduction of the Single Farm Payment Scheme (SFPS), that decouples support from production, is of particular significance in how the landscape will be sustained by farmers in Dumfries & Galloway. Farmers will no longer be paid on the basis of the amount of livestock they have or area of crops they grow, and therefore one might expect stocking densities to reduce. Subsidy farmers will receive an annual payment and, with some exceptions, they can do any agricultural activity they wish without their SFP rising or falling. However, farmers need to meet Cross Compliance requirements including eighteen European regulatory requirements covering the environment, food safety, animal and plant health and animal welfare. Secondly, they should maintain their land in Good Agricultural and Environmental Condition (GAEC). The Cross Compliance requirements and measures aim to promote a more environmentally friendly and sustainable approach to farming in Scotland. It has been anticipated that the introduction of the SFP will make a strong positive visual and environmental impact on the countryside (Schwarz *et al.*, 2005; Scottish Executive, 2006b). From a tourism perspective, the current trajectory of environment-focused agricultural policy appears set to increase the attractiveness of Dumfries & Galloway as a tourism destination. In theory, there should be more wildlife to view (Stolze *et al.*, 1999; Wickramasinghe *et al.*, 2003) which will strengthen the region's position with regards to ecotourism development.

The integration of environmental sustainability criteria into VisitScotland's Quality Assurance scheme is a new policy direction of the Scottish Executive and from 2015 all businesses wishing to work with VisitScotland will need to have reached at least entry level of the GTBS (Scottish Executive, 2006a). While this is not strictly regulation, since being Quality Assured is optional, it is recognised that most enterprise owners are Quality Assured and the Executive aims to have 90% of tourism businesses under this scheme by 2008. Perspicaciously, it could be argued that the Scottish Executive's policy direction is an attempt to regulate environmental sustainability of accommodation providers by reducing their choice of whether they join the GTBS or not. Although the Scottish Executive suggest there will be no initial cost to enterprises for joining the GTBS other than being Quality Assured under VisitScotland, there are likely to be some costs as many enterprise owners attempt to

meet basic environmental standards. This may prove problematic given that many farm enterprises generate low levels of income from tourism. It is however important that there is no initial cost since some farm-based enterprise owners have noted that the cost of joining the GTBS was expensive and was perceived as bringing little benefit in terms of new custom.

It is not claimed that all aspects of environmental sustainability have been reviewed here, however what this research has revealed is that farm-based accommodation consumers appreciate a good environmental standard although they are unsure of how to find this information. The GTBS website or the owners' website is unlikely to help visitors source environmentally sustainable accommodation despite the fact that many participate in environmental management to a greater or lesser degree. The environmental sustainability of farm-based accommodation at present could be considered low but this looks set to change as all Quality Assured businesses join the GTBS. However there are still challenges because of the relatively low participation in the VisitScotland QA scheme in this sector. Given their small-scale and integration within the existing rural landscape farm-based accommodation could potentially serve as the ideal type of accommodation for visitors with ecocentric beliefs.

#### *6.5.2 The importance of the farm environment*

It has been suggested that farm tourism is "rural tourism conducted on working farms where the working environment forms part of the product from the perspective of the consumer. This contribution may be as passive as an appreciation of the working farm environment as the backdrop to the tourism experience" (Clarke, 1999: 27). In this section the importance of the farm environment is discussed from both a supply and demand perspective (Table 6.9).

**Table 6.9 What makes farm accommodation attractive: supplier and consumer perspectives**

(N = 60)	Very important/ important	
	Suppliers N=60	Consumers N=122
High quality accommodation/tourist board ratings	70%	74%
Experiencing a rural way of life	59%	45%
Being close to nature	53%	69%
Lots of wildlife to see	53%	
Being a working farm	48%	41%
Remoteness of the accommodation	46%	58%
Variety of activities to do	42%	

As mentioned previously accommodation providers clearly feel that the quality of the accommodation is fundamental in attracting visitors to the farm, a sentiment matched by consumers of farm accommodation. This philosophy among most enterprise owners is mirrored in the literature where quality is viewed as an important aspect of sustainable rural tourism provision (Roberts and Hall, 2001; Youell and Wornell, 2005). Despite this only 66% of the 110 farm accommodation businesses identified in Dumfries & Galloway were members of the VisitScotland QA scheme. This is not to say that others are not inspected through quality assurance schemes such as the RAC or AA. Nevertheless, the proportion of farm accommodation providers in the study region who are Quality Assured appears relatively high in comparison to Yorkshire, Cumbria, Devon and Cornwall ( $\leq 42\%$ ) all of which have well established farm accommodation markets (Deakin, 1997; Morris, 2002). However QA participation in the study region is some way short of the 90% target set by the Scottish Executive in their new national tourism strategy. Farm businesses have noted that “the grading system is helpful but expensive for a very small business” (Farmer J) and this is likely to be one reason why a third of farm-based accommodation providers are not Quality Assured. For 81% of farm-based accommodation consumers (N = 122) ‘value for money’ and the ability to ‘relax and escape daily stresses’ (79%) are foremost reasons for choosing farm-based accommodation. Determining whether a product is value for money is likely to depend on the quality of goods offered and the tourist board ratings play an important role in this respect:

“Most tourists look for a tourist board grading of accommodation before they actually pick up the phone” (Farmer N)

In addition to the quality issue, there is a perception among enterprise owners that experiencing a rural way of life is an important aspect of farm accommodation although one might argue that staying one week in rural accommodation is unlikely to provide an authentic rural lifestyle experience. Nevertheless, a significant proportion of consumers feel that staying in farm accommodation provides a taste of rural life, although as discussed below this does not mean that visitors actively engage in farm duties. Although not statistically significant, consumers with children tend to value experiencing a rural way of life more than those on holiday alone or with their partner. Farm accommodation provides an opportunity to be close to nature which is less attainable if staying in other forms of rural accommodation such as hotels, and both enterprise owners and consumers clearly appreciate this aspect of farm accommodation. Visitors who express ecocentric attitudes and have a reasonable knowledge of nature and natural ecological processes may be more critical of this aspect of farm tourism given that farming activity modifies natural habitats. Even so, farms are typically located in more remote locations which are important to consumers (Table 6.9), and sites of ecological importance that represent more ‘natural’ environment are normally close by. The role of farmers is also changing and there is clear evidence of a shift towards more ecologically friendly ways of managing farmed landscapes. This helps to strengthen farm accommodation as a potential form of environmentally sustainable rural accommodation (Ilbery and Bowler, 1998). The remote location of most farm enterprises contrasts with the urban existence of most visitors and represents an important departure from the norm. The remote location was considered important by 58% of consumers of farm accommodation. The feeling of remoteness that farm accommodation consumers’ desire is unlikely to be achieved through staying in hotels or guesthouses which are typically located in or around the major towns in Dumfries & Galloway. Likewise, many of the caravan/campsite locations in the region are large-scale having more in common with mass tourism complexes. Farm-based accommodation is therefore unique in delivering a highly valued remoteness function, and therefore merits classification as specialist accommodation (Moscardo *et al.*, 1996).

Many consumers also value the fact that the accommodation is located on a working farm, although this physical feature does not appear to be as important as the by-products such as remoteness, peace and quiet and the ability to get close to nature. This finding was paralleled in the interviews with farmers, where on one hand it was suggested that the enterprise was much more than just accommodation:

“A lot of people coming to the farm want a farm. They like the open spaces and also seeing the animals” (Farmer H)

On the other hand the status of the land where the accommodation is situated can sometimes be considered less important than the by-products of the farm location:

“It’s just the isolation that they want, the peace and quiet. The remoteness seems to be more important than the actual farm. I thought it would be important to them. I do wonder if we never had the farm but just a few acres, like a field round about the farm, I actually don’t think we would lose many customers” (Farmer J)

A high proportion of consumers in this thesis sample have stayed in farm-based accommodation before (45%) thus suggesting visitors value the farm environment. Repeat consumers appear to place more importance on the working farm environment (65% indicated it was very important or important) than those who had not stayed in farm accommodation before (29%).<sup>81</sup> This finding may also suggest that if a consumer has had a positive experience staying in farm accommodation they are likely to use it again.

95% of farm-based accommodation providers in the sample stated that visitors were interested or very interested in farming (sample = 60), although a lower, but still high proportion of consumers confirmed this (65%). In some ways, staying in farm accommodation may help to dispel rural idyll myths about the countryside, but conversely, accommodation providers can confirm the rural idyll simply by ensuring

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<sup>81</sup> The difference in attitudes between previous consumers and new consumers of farm accommodation towards the working farm environment was statistically significant at the 90% confidence level but not at the 95% level ( $\chi^2 = 9.056$ ,  $df=4$ ,  $p=0.06$ ).

that the consumer has a faultless and enjoyable experience while staying in the countryside. One interviewee, Farmer K, revealed her anxiety over visitors seeing dead or ill animals in her fields, a rural reality which she is keen to hide from the gaze of consumers.

Whilst the farm environment is important as a backcloth for relaxing and passively experiencing a rural way of life, this does not necessarily mean getting involved in farming activities. 92% of farm-based accommodation owners stated that visitors do not engage in farm duties. One fear that discourages farmers from engaging visitors in farm work is liability:

“I discourage it [farm work participation]. I think it’s partly a liability thing and it can be very disruptive to getting a day’s work done. What I think people want is a flavour of the farm not actually to get their hands dirty” (Farmer L)

“A lot of people from the towns don’t know how to handle stock and things, and it can lead to a lot of problems, so we keep them as separate as possible” (Farmer B)

Farmer L makes the noteworthy point that most visitors are not particularly interested in working on the farm as part of their holiday experience, and as discussed below there are specific holiday experiences that cater to these needs. Farm environments can be dangerous places and it is understandable why many farmers create distance between visitors and the agricultural operations. Furthermore, following FMD and BSE, farmers are conceivably less likely to encourage hands-on participation or allow access to fields with livestock where it represents a threat to both bio-security and the visitors.

Representing a departure from the norm in Dumfries & Galloway, five farm-based accommodation owners did state that consumers sometimes engaged in hands-on farm activities. One interviewee who operates a 121 hectare organic cattle and sheep farm alongside her husband describes that some of her guests have experienced

authentic farming activities on holiday directly and that this represents as a form of education for (primarily) urban-based visitors:

“At the moment we have a couple with four girls and the girls are aged three, five, seven and nine, and one day last week we told them we were gathering sheep in so they came into the field and helped to gather the sheep in. The mother also helped to douse the ewes. So actually, it was a subtle bit of education. It’s quite nice and they like it, it works well”  
(Farmer C)

It may be of some consequence that three out of the five farmers who allow some form of consumer activity on their farm are organic farmers, which in theory suggests they are unlikely to have intensive farming units or use hazardous chemicals or pesticides that could potentially harm the health of visitors. In fact 17% of all farm accommodation enterprises in the sample (sample=54) are located on farms that practice organic methods of agricultural production. The activities that visitors do get involved with tend to be un-planned events, and no farm-based accommodation providers specifically advertised or promoted a hands-on experience as part of their product. These types of product do exist, for example the Willing Workers on Organic Farms organisation (WWOOF) aims to introduce members to organic farming, enable town dwellers to experience living and working on a farm, show alternative ways of life, improve communication within the organic movement, help develop confidence in becoming self-sufficient and meet interesting people and make useful contacts (McIntosh and Campbell, 2001). In Scotland there are eighty farms involved with five located in Dumfries & Galloway including Farmer C who enjoys the company and benefits from the additional labour input. This is however a fundamentally different product from the capitalist tourism enterprise since WWOOF visitors profit from free lodgings and host knowledge in return for labour input.

## **6.6 Social sustainability and farm-based accommodation provision**

### *6.6.1 Farm-based tourism and sustaining agricultural identity*

Lanc (1991, 1994b), among others, believes that sustainable rural tourism should aim to sustain the culture and character of host communities. It is over simplistic to suggest that there is a single culture in Dumfries & Galloway to sustain, however the study region has nevertheless been historically shaped by agriculture which carries with it an associated cultural identity (Crouch, 1994). For most of the 110 farming families diversification into tourism accommodation provides a relatively low, but important, source of income that allows them to sustain their cultural identity as farmers and therefore maintain the social fabric of farming communities (Roberts, 2002). Even the 13% of farming families in this sample who generate most of their income from tourism and the one farmer who generates all of his income from tourism continue to farm despite falling agricultural profits. This demonstrates that agricultural identity is important to farm-based accommodation providers and tourism can play an important role in sustaining this social status.

This research found no evidence to suggest that farm tourism is having a negative impact on the cultural identity of accommodation providers, although if tourism becomes more important (either economically or socially) than the agricultural enterprise then it is possible that some enterprise owners may abandon agriculture to concentrate on tourism provision. In which case, the role of diversification in spreading risk has become too successful and farmers (now tourism operators) will become dependent on another industry that is subject to fluctuations.

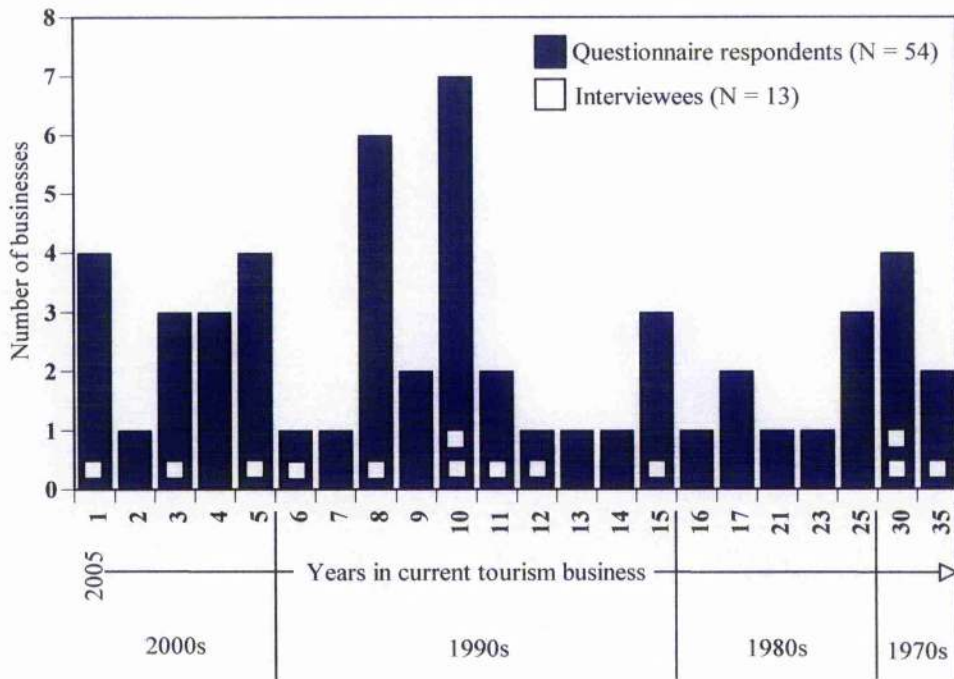
### *6.6.2 Farm-based accommodation provision and empowerment*

Farm-based accommodation provision in Dumfries & Galloway is primarily managed and owned by females (74%), a finding that appears to be almost universal regardless of where studies take place (Busby and Rendle, 2000; Gasson, 1980; Gladstone and Morris, 1998, 2000; McIntosh and Campbell, 2001; O'Connor, 1995). Many of these operators have been in the tourism business for a long time (Figure



6.6) and the knowledge and experience accrued by these stakeholders over the years make them a valuable asset for tourism planners aiming to position the region as a sustainable destination.

**Figure 6.6** Length of time in current tourism business



The high proportion of female farm tourism owners can be viewed as addressing one social aspect of sustainable development and Agenda 21 - the empowerment of women and ownership of resources (United Nations, 1992). While tourism in general is a major employer of women worldwide there appears to be significant horizontal and vertical segregation of the labour market (Hemmati, 1999). Horizontally, women and men are often given different roles - women being employed as waitresses, chambermaids, cleaners, travel agency sales persons, flight attendants<sup>82</sup>, whereas men are employed as barmen, construction workers, drivers, pilots, etc. Vertically, the typical 'gender pyramid' is also prevalent - lower levels and occupations with few career development prospects being dominated by women and key managerial positions being dominated by men (Hemmati, 1999). Research in France has shown that gender is the driving force behind the development of farm tourism and this is

<sup>82</sup> Globally 90% of the people in these occupations are women (Hemmati, 1999).

related to women's fight for professional status within the farm and their desire to create new activities for which they are responsible (Girauld, 1999).

In section 6.2 of this chapter it is shown that the main reasons for diversifying in Dumfries & Galloway were to generate extra income and make use of redundant cottages, however respondents also provided other reasons some of which reflect a desire for responsibility, an example being developing the tourism enterprise 'for a challenge'. For other enterprise owners, such as Farmer G, establishing the tourism business allowed her to:

"Combine working at home with looking after children when they were small" (Farmer G).

Around 7% of enterprise owners stated that starting a tourism enterprise allowed them to work from home and this relates to the finding that most tourism operators also work on the farm. Changing roles within the family, as the following interviewee notes, is another social reason for diversifying and can have little to do with the financial difficulties facing many farmers:

"When our son came back from [college] and came home to work on the farm, it became...I was sort of redundant, in as much as the jobs that I had done, the calves, the washing-up, the milking, he was now doing. All my jobs were taken over by my son, and that was really when I started up the B&B, it was through boredom" (Farmer M)

Most of the interviewees noted that their spouse (predominantly male) often have nothing to do with the operation of the tourism enterprise, preferring instead to concentrate their efforts on agricultural production and in some cases other forms of pluriactivity. Farmer E, a dairy farmer, self-catering operator and part-time schoolteacher stated:

"I look after the tourism side of things. Jim [named protected] takes nothing to do with it. I don't even think he's been in the house. He sticks

to the farming side of things. But I enjoy that, it is good for me" (Farmer E)

It benefits Farmer E in a social capacity in as much as she enjoys having control over the business; she has a passion for educating guests about farming and the countryside, and considers her tourism business to be fundamental for the survival of the dairy farm. In other words, the tourism business has empowered this enterprise owner to some degree. While the division of labour with regards to the operation of the tourism business appears fairly entrenched, most female interviewees divulged that they pursue agricultural work alongside their spouse. So although the tourism enterprise can empower females and therefore address issues of social sustainability and ownership of resources it can also create gender inequality in terms of labour division. The dualistic role of female farm-based tourism owners has been noted by other researchers (Dernoi, 1991a; Gasson, 1980; McIntosh and Campbell, 2001). Dernoi (1991a) informs us that 81% of women operating tourism businesses on farms in Australia work on the farm, and also do most of the housework. Only two of the fourteen farm-based accommodation providers interviewed in Dumfries & Galloway do not participate in some form of agricultural work. There is now a trend that more spouses work on farms in Scotland, reflecting the decline in regular and casual agricultural employees since 1983 (Scottish Enterprise Dumfries & Galloway, 2004).

An interesting finding is that proportionally fewer females in Dumfries & Galloway manage farm-based accommodation businesses that contribute to more than half of the total household income (8%) in comparison to males (29%). This might indicate that women are disempowered once the tourism enterprise is more economically sustainable than the farm business, although when gender and proportion of total household income are cross-tabulated and tested using the Chi-square statistic ( $\chi^2$ ), no statistically significant differences were found ( $p > 0.05$ ).

### 6.6.3 Social sustainability and operator satisfaction

Visitor satisfaction is often used as an indicator of sustainable tourism (Dymond, 1997; Lanc, 1994b; UNEP, 2003) yet little consideration is given to the satisfaction of the enterprise owners. It is argued here, however, that satisfaction is a two-way process and operators need to gain some form of personal satisfaction from operating a tourism enterprise for it to be socially sustainable in the long-term. Unsatisfied and negative tourism operators are more likely to provide a poor personal service which is unlikely to encourage repeat custom therefore impacting on economic capability (Reisinger, 2001). It is important to reveal the challenging aspects of operating a farm-based accommodation business as this provides a depiction of the realities of the tourism agriculture juxtaposition (see Section 6.5.6).

**Table 6.10 Elements of satisfaction from operating a farm tourism enterprise**

<b>Satisfying elements</b>	<b>(N = 54)</b>
Satisfied customers	44%
Meeting new people	32%
Getting repeat customers	20%
Receiving positive feedback from customers	15%
People enjoying the local area	13%
Educating guests	9%
Extra income	7%
Renovating the farm buildings	7%

Farm-based accommodation providers appear to gain personal satisfaction from having 'satisfied customers' which is a reflection, like 'getting repeat visitors' and 'receiving positive feedback', on the quality and good services that are provided. For almost a quarter of accommodation providers, providing a quality service was one of the top three business goals. These are aspects which confirm to the operators that the service they provide is worthwhile and appreciated by the customers. In this respect, feedback from customers is fundamental in maintaining social sustainability and creating a sense of well-being for operators, as long as the feedback is positive.

Some operators also attain personal satisfaction from the knowledge that visitors enjoy the local area. This demonstrates pride in their local surroundings while confirming that they stay in a beautiful part of the country (Table 6.10). This could potentially provide an incentive to enhance the environmental quality of the tourism enterprise and farm environment in order to attract more customers and sustain the elements that visitors find most attractive. Some of the specific satisfying elements mentioned above are given greater attention in the following sections.

#### *6.6.4 Social sustainability and operator isolation*

Social reasons for starting a farm tourism business are not uncommon and serve to highlight the wider benefits from diversification into tourism (Gladstone and Morris, 1998, 2000; Orban and Teckenberg, 1996). One of the main ways in which farm-based accommodation provision can contribute towards social sustainability is through contact and meeting new people, one of the reasons why many farmers in this research have chosen to diversify into tourism (Table 6.3). This social benefit reflects the isolated nature of farming which is often perceived to be a lonely profession associated with higher than normal suicide rates (Stark *et al.*, 2006). This reiterates the benefits that can be accrued from developing social capital through a specific farm tourism network where providers can discuss issues and socialise. Describing the benefits from the contact with visitors gained through her tourism enterprise one interviewee noted:

“Contact with the public. It’s been a good thing, quite refreshing to have that because farming can be quite isolated. You don’t always meet potential customers or meet normal people, if you like. That’s been rewarding I’d say, I’ve quite enjoyed that” (Farmer F)

Another farm-based enterprise owner revealed that she gained satisfaction from watching her “children meeting and socialising with other children each week” and how “it’s really good for them to meet other children” from different cultures (Farmer B). Certain types of farm accommodation lend themselves to greater contact with guests than others. For example B&Bs, which were the second most frequent

type of farm accommodation in this study, can be considered a more social form of farm-based tourism usually taking place within the owner's farmhouse. This is supported by the finding that 75% of B&B owners in this sample have daily conversations with their guests whereas just 53% of self-catering operators communicated on a daily basis with visitors. Unlike self-catering accommodation which can appear detached from the farming family and agriculture, B&B accommodation provision initiates interaction between the hosts' private life and the guests (Nilsson, 2002). While this research has not set out to determine whether the level of customer contact in farm-based accommodation is higher or lower than that experienced in other forms of rural accommodation (hotels, etc.), it is hypothesised that, in general, farm accommodation are likely to be more personal and therefore specialist in this respect (Moscardo *et al.*, 1996). Further research might like to test this conjecture.

#### 6.6.5 *Social sustainability and education*

Besides being a personally satisfying aspect for farm-based accommodation owners (Table 6.10), educating guests and the social contact between the host and visitor can "pave the way for understanding and thereby diminish the risk of prejudices, conflicts, and tensions" (Nilsson, 2002: 10). This is the basic premise of the 'contact hypothesis' described by Reisinger (1994) who feels that the different views of different cultures can be reconciled through contact.

Some farmers revealed their intention to use their status as accommodation providers to educate visitors on farming issues and primary production, and hopefully derive some economic benefits from this:

"One of the things I'm going to do next year is I'm going to have a little welcome meeting and just see what type of response I get. The biggest problem that the food industry has in this country is that the general public know absolutely nothing about how their food is produced and how it's grown. That's why, as a farmer in primary production, you can't get a fair price for what you produce because at the end of the day the punters who

are buying it don't put any value on it. The other spin-off from this is, if I can find 30% of visitors with an interest in organic food, there's not a lot stopping me from tying up with the local butcher and doing a mail order beef thing. Now they know the beef's coming from here, they've seen it and all the rest of it, so it gives another connection if you like, so beef and lamb and possibly vegetables as well. It's just another way, if you like, of making a bit more out the holiday (Farmer N)

This example demonstrates how one farmer aims to raise his revenue from the tourism business not through accommodation growth but through 'adding value'. This sustainable approach to business development is similar to the way in which the Scottish Executive aims to achieve economic sustainability through tourism development across Scotland (Scottish Executive, 2006a). Farmer N also reveals potential networking opportunities with other local businesses thus providing further economic benefits to the wider community. He views the public education as a means to gaining a better price for agricultural produce. His efforts could help to increase the economic and social sustainability of agriculture at least for himself. This proposed model does appear to conform to sustainable rural tourism ideals and if other farm accommodation providers adopted a comparable approach then this could indeed help the future sustainability of rural areas such as Dumfries & Galloway.

Other farmers also enjoy educating visitors about the countryside, which is a benefit that visitors staying in other forms of rural accommodation are less likely to reap. Again this highlights the specialist status of farm accommodation in Dumfries & Galloway (Moscardo *et al.*, 1996). Farmer L stated that "I often give an hour or two's guided tour and they can learn a bit more as they go round" the farmland. In this instance the educational focus is primarily on the flora, fauna and the conservation efforts he has done to in order to sustain and encourage biodiversity on his land. He hopes this will be appreciated by visitors who have the opportunity to partake in informal recreation on the farm. His face-to-face interpretation may also help to stimulate visitors to develop an interest in nature conservation and therefore help to create more environmentally aware citizens. Other farmers like to educate

their guests as a way of dispelling myths about farmers and to address ignorance with regards to agriculture:

“Some people say do you have to milk the cows on a Sunday, you know they don’t have a clue” (Farmer E).

This accommodation provider educates visitors by taking them up to the dairy farm and demonstrates the milking process. Like Farmer N above, Farmer E aims to reveal to visitors the effort that goes into milk production so that visitors will appreciate dairy farmers and perhaps think about the price they pay for produce. Further research might attempt to determine whether staying in farm-based accommodation actually changes the views and perhaps even the purchasing habits of visitors.

#### *6.6.6 Challenges of operating a farm-based accommodation enterprise*

While there are numerous aspects that may contribute towards social sustainability it became apparent in this research that there were also a number of challenges of operating both farm and tourism businesses (Box 6.2 - the numbers in brackets refer to the number of times a particular difficulty was cited). However, it is important to point out that nearly one fifth of questionnaire respondents (sample=54) stated that there were ‘no difficult aspects’ of operating a farm-based accommodation business suggesting it represents a good marriage with agriculture.

As discussed elsewhere, issues over liability represent one problem for farmers offering accommodation on the farm and for this reason most farmers do not allow visitors to engage in farm duties. In terms of health and safety, farm steadings can be dangerous environments given that heavy vehicles and machinery are stored there and livestock can sometimes be unpredictable in their behaviour. Some farmers overcome this challenge by making time to:

“explain to town dwellers the dangers of the farm, and making them aware of the consequences of actions which can cause problems” (Farmer N).



**Box 6.2****Difficult aspects of operating a farm-based accommodation business***Conflicts with agriculture*

- Practical conflicts (14)
- Both businesses peak at the same time (3)
- Health & safety issues (3)

*Time issues*

- No free time (6)
- Too much work (4)
- Long hours (2)
- Extremely busy summers (2)
- Ties you down (1)

*Customers*

- Constant demands (3)
- Customers with a lack of respect for the countryside (1)
- Customers with a lack of knowledge about farms (1)
- Keeping noise levels down (1)
- Getting visitors we like (1)

*Family commitments*

- Balancing work and family (4)

*Uncertainty*

- The uncertainty of bookings (1)
- Knowing how much advertising is needed (1)
- Making money (1)

*Support/help*

- Finding people to help with tourism tasks (2)

*Skills/ Training*

- Need new skills (1)

Conflicts are considered here to be those that are inherent difficulties of operating both a tourism and agricultural business, including the 'smell of slurry' and 'consumers seeing dead animals'. These represent challenges rather than threats to the social sustainability of farm-based tourism diversification that can be overcome by educating guests about the realities of farming. The following illustrates some other conflicts raised by accommodation providers:

"There are days when you are dipping sheep and need to move livestock around the farm at the same time as the guests are arriving" (Self-catering provider)

“When you have animals, keeping the courtyard clean is difficult” (Mixed accommodation provider)

Several respondents noted that the peaking of agricultural activity and tourism activity at the same time represented a challenge for them. Little can be done to resolve this issue apart from encouraging visitors during periods when agricultural activity is less intensive and reducing visitation levels during peak agricultural periods. Positioning Dumfries & Galloway as an ecotourism destination could help in this respect by encouraging greater visitation to the region outwith the peak periods. Farm-based accommodation with its small-scale credentials, rising environmental standards, remoteness and closeness to nature appears well placed to capitalise on ecotourism development. This could help to solve conflicts with agricultural activity and also increase economic sustainability by providing income during the shoulder months of the tourism season and the agricultural year. Spring can bring financial burdens for many livestock farmers (buying in feed, etc.) and income from livestock generally starts in the autumn, therefore ecotourism development could potentially help fill an important income gap for farmers.<sup>83</sup>

Time issues were identified as the second major difficulty of operating a tourism business, and this relates to the labour intensive nature of operating a tourism enterprise and pursuing agricultural duties. Three operators noted that ‘constant demands’ are a difficult aspect of operating a tourism business, this reality may come as a shock to some farmers who usually spend most of their time with animals that also need regular attention. The constant demands of tourists has been highlighted as an issue with regards to mass tourism but is seldom highlighted as an issue in rural tourism. Boissevain (1996: 9) writes “without some respite from the constant demands of tourists, hosts become enervated and their behaviour towards tourists hostile”. However, there is no evidence presented here to suggest that farm-based accommodation providers are hostile to visitors: in fact visitor satisfaction appears to be a top priority for enterprise owners.

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<sup>83</sup> The Scottish Farmer, 28 October 2006.

There were also a number of other operational difficulties with regards to visitors mentioned, such as 'customers with a lack of respect for the countryside' and 'customers with a lack of knowledge about farms'. These are not however problems for most enterprise owners. Farmer E did note that sometimes visitors "complain about the cows mooing" and she gets the "occasional townie who objects to stepping in manure". It is evident that Farmer E does not always attract visitors who appreciate the authentic farm experience.

The last challenge shown in Box 6.2 relates to the operation of the tourism enterprise and the need to develop new skills. Although only one enterprise owner mentioned it as a particular challenge, one quarter of all farm tourism owners found the lack of tourism training problematic when starting, and 30% found a general lack of guidance problematic. The greatest problem for most farmers was knowing how to market their tourism enterprise (59% found this problematic). These findings confirm that many farm accommodation enterprises have developed in an *ad hoc* manner. The lack of use of organisations such as Scottish Enterprise and the local tourism board in planning the enterprise may represent stubbornness on the behalf of farmers, or it may indicate that many diversifiers are unaware of the services that aim to help businesses achieve their capabilities. Perhaps more can be done to advertise these services locally.

## 6.7 Concluding remarks

Utilising a qualitative and quantitative approach, this chapter has examined the economic, environmental and social sustainability of farm-based accommodation. It has investigated farm tourism development as a structural diversification strategy and a form of rural accommodation in the under-researched study region of Dumfries & Galloway.

Tourist accommodation on farms represents one of a number of different types of accommodation available for the consumption of tourists in Dumfries & Galloway. This research has shown that the farm environment is valued by consumers along with the by-products such as peace and quiet, remoteness and proximity to nature,

and many visitors have utilised this type of accommodation before. It differs from other forms of rural accommodation such as hotels and caravan parks in that it is typically small-scale offering a more intimate, personal and authentic form of accommodation. It allows for important visitor desires such as remoteness and closeness with nature to be met, aspects that other forms of rural accommodation cannot achieve. It can therefore be argued that it represents ecologically-sustainable accommodation and is specialist because of these features. Despite low participation in formal environmental management schemes (GTBS), many enterprise owners voluntarily engage in environmentally sustainable practices such as recycling and reducing water consumption, thus demonstrating one way in which farm tourism contributes towards environmental sustainability.

Accommodation on farms represents one potential structural diversification strategy for farmers currently experiencing financial and other difficulties due to rural restructuring. This chapter has shown that the adoption of this structural diversification pathway is low in Dumfries & Galloway with only 4.4% of main agricultural holdings offering this tourism service. Other forms of pluriactivity may therefore be more important as farmers adjust to agricultural restructuring, or this may also indicate that many farmers do not feel the need to generate additional income or have the resources to do so. Based on the findings presented in this research, farm-based accommodation provision is not a major indicator of the post-productivist transition in Dumfries & Galloway.

For the 110 identified farming families that have chosen this diversification strategy in the region, the most common reason for doing so is to 'generate additional income'. This is similar to findings elsewhere and serves to highlight the difficulty that many farmers face in generating an income from agriculture alone. This research has revealed that a significant proportion of farmers have diversified into tourism because they have the physical resources to do so, for example spare bedrooms in the farmhouse or more commonly, redundant cottages. The research reveals that agricultural restructuring and the reduction in agricultural labour force (external to the family) has resulted in the availability of former workers cottages, and these now serve as self-catering accommodation. The recycling of redundant farm buildings represents another contribution towards environmental sustainability.

This investigation has shown that farmers starting a tourism business face a number of challenges. Interviews revealed that generating the required capital to renovate and recycle agricultural buildings for tourism use can be problematic for farmers in Dumfries & Galloway. Very few farmers in this research made use of grant support through government diversification schemes to help fund their tourism enterprise. The main reasons for this seems to include the perception that grant support is restrictive and places too many bureaucratic obstacles to make applying worthwhile. A more fundamental reason is that many farmers lack the economic capital required to match grant funding. A third reason revealed through this research suggests that there may be over supply of tourism accommodation in some parts of the region thus decision-makers will not help fund farm accommodation enterprises in these locations.

Without adherence to grant support conditions, such as developing a formal business plan and demonstrating the need for facilities locally, it is concluded that most farm accommodation enterprises in Dumfries & Galloway have developed in an *ad hoc* manner. This is evident through the lack of specific formal business goals. Consequently it was not surprising to reveal that over half of the businesses surveyed indicated that they had found it difficult to market their tourism business. The lack of guidance and tourism training are identified as particular challenges for farmers adopting this diversification option. This highlights that *ad hoc* development could potentially have a negative impact on the economic sustainability of enterprises.

Interviews and questionnaire surveys revealed that the benefits to farmers in the region from diversifying into tourism are both economic and social. However, the income generated from the accommodation business is low compared to other sources of revenue that make up the total household income. Just over half of all respondents indicated that tourism contributes 10% or less to total household income, although some 13% do generate more from tourism than any other source of household income. Diversification into tourism is also viewed by many farmers in the region as a long-term capital investment in property that can be withdrawn at a later stage or passed to offspring, although transferring capital from the agricultural business to the tourism business is viewed as a risk by some. An adverse event such as FMD highlighted the vulnerability of both industries and has been financially

difficult for farmers who have transferred most of their agricultural capital into tourism therefore receiving no compensation for lost revenue.

It has been shown that farm tourism does provide self-employment opportunities and a small number of external employment opportunities. However, as a form of rural development in Dumfries & Galloway it is not a major force in addressing the wider issues of a declining agricultural labour force nor is it likely to help stem the outward migration of younger residents to more prosperous regions. Its contribution to economic sustainability in this respect is limited. However, it does help to keep some farmers in their vocation and provides self-employment opportunities in remote areas where very few other employment opportunities exist.

Despite the low proportion of household income generated from diversifying into tourism accommodation, the research revealed that most farmers found the transition to have been a good financial decision. For most enterprise owners, tourism alone is economically unsustainable although when combined with other sources of income it plays an important role in the survival of the farm and maintenance of cultural identity. Diversification into tourism has been shown to deliver important social benefits to many farmers in Dumfries & Galloway, including the empowerment of female spouses leading some to financial autonomy and greater control over farm survival. One of the foremost social benefits identified is meeting other people and cultures thus reducing the feeling of isolation from working and staying in a remote location. Most tourism operators talk with guests on a daily basis demonstrating the social nature of farm accommodation, a feature arguably lacking from less personal large accommodation enterprises such as hotels. Like the consumers sampled in this research, farm accommodation providers in Dumfries & Galloway appear to appreciate that quality is important, although this need not be achieved through formal schemes. This sub-sector of rural accommodation lags slightly behind the Scottish average of 70% participation with two thirds engaging in VisitScotland's Quality Assurance scheme. Enterprise owners derive personal satisfaction from positive consumer feedback and from exceeding visitor expectations.

Seldom are the difficulties of the tourism-agriculture juxtaposition made explicit in studies of farm-based tourism, however this research has revealed a number of

challenges including practical and temporal conflicts. Solutions to some problems are achievable by aligning farm accommodation with ecotourism development. This may pay further social, economic and environmental dividends.

As a defined and unique form of rural tourism, farm accommodation is underdeveloped in Dumfries & Galloway. Current networking and brand identity is poor and there is no single promotional source that all enterprises are part of. This makes it difficult for consumers who wish specifically to stay in farm accommodation while in Dumfries & Galloway. The research reveals a level of animosity towards VisitScotland.com and in particular the high fees for participation on their website. This has stimulated the development of a grass roots networking organisation, although it is not exclusively farm-based. The lack of specific brand identity and networking could impact negatively on the economic sustainability of this sector of rural tourism. Benefits from developing a formal, focused and proactive network include building social capital, reducing isolation between operators, cementing a stakeholder status within the region, generating more business and pooling resources to create a brand identity.

## CHAPTER SEVEN

### 7 CONCLUSIONS: SUSTAINABLE RURAL TOURISM DEVELOPMENT IN DUMFRIES & GALLOWAY

#### 7.1 Introduction

This final chapter draws together the main findings and conclusions from the research. Its purpose is to address the arguments developed in the literature review and consider implications of the findings presented in Chapters Five and Six for the sustainable development of rural tourism in Dumfries & Galloway. This chapter begins by reflecting on the methodological approach adopted drawing attention to its rigour in using mixed methods and also the challenges encountered. Following this, a critique is made with regards to conceptualising sustainability. This is followed by the main conclusions where farm-based accommodation and ecotourism development are discussed. The ways in which this thesis has contributed to existing knowledge and areas of future research are also highlighted.

#### 7.2 Studying rural tourism: some reflections on an adopted approach

From a social science perspective, the study of rural tourism is clearly fundamental given that this phenomenon impacts on individuals, communities, regions and environments, and can illuminate aspects of these in this ever-changing milieu. This is of academic interest and can have empirical application. Within tourism studies lie a number of disciplines (e.g. human geography, sociology, anthropology, etc.) each with its own range of epistemological stances and diverse methodological approaches for the researcher to draw upon. The study of tourism is also a business discipline, which is considered by some to embrace more positivist methods in contrast with the hermeneutic approaches currently gaining ground in tourism research (Ritchie *et al.*, 2005). Both are valuable ways of gaining knowledge about the tourism phenomenon. It is argued here that it should not be a case of adopting one approach or the other but rather using what suits the research requirements and what is the most appropriate for delivering the aims. As mentioned in Chapter Four, despite some tourism departments being located within business faculties and others



in social science schools, tourism researchers are in the fortunate position of having no fixed disciplinary boundaries and can draw upon both qualitative and quantitative methods.

Studying tourism, and in particular visitors, brings a number of broad practical complications when it comes to adopting a suitable set of methods to extract primary information. One of the most significant challenges is that visitors are mobile subjects and therefore may be difficult to locate. This is particularly true in some rural areas outwith the main settlements where visitors can be fragmented in low numbers across a large geographical area. Another challenge is that tourists often visit areas to pursue activities that are different from their everyday existence including work related duties, and filling in surveys or perhaps even more intrusively, engaging in interviews, may be viewed as too much of a departure from the holiday or recreational experience. A further challenge is timing, not only in terms of generating information from different types of visitors who may visit a region at different periods throughout the year but also in terms of approaching visitors at a locale. Researchers have an ethical duty to ensure that the subjects of inquiry are not inconvenienced greatly.

Some qualitative techniques such as lengthy focus-groups are unlikely to be attractive to visitors on holiday, whereas quantitative methods such as self-administered questionnaires can be completed at the convenience of the visitor. These are not strictly comparable methods since each approach generates significantly different types of data. The use of semi-structured interviewing with visitors in the field is possible, as demonstrated in this thesis, however these only last as long as the visitor wants to converse. This is true of any interview regardless of the subject of inquiry. For non-mobile tourism subjects such as accommodation providers or managers of tourism facilities, the methods of information extraction are less restricted although there are often challenges in engaging small-scale businesses in voluntary research (Lane, 1994a; Roberts and Hall, 2001).

Many SMEs in rural areas are owned and operated by one person, sometimes with another occupation (farmers), and are therefore extremely busy and sometimes unwilling to spend time talking to a researcher. Farmers as subjects of inquiry

represent another challenge for the researcher. Although they are well accustomed to quantitative methods of data extraction (completing the agricultural census each year) many farmers are critical over the amount of formal paperwork they have to complete. This represents a challenge for the researcher whose attempts to solicit information is entirely voluntary. Nevertheless, questionnaires remain a well-used method of extracting information from farm-based tourism operators (Gladstone and Morris, 1998; Hill and Busby, 2002; Sharpley and Vass, 2006).

Although Hill and Busby (2002) justify their single quantitative method approach in addressing farm accommodation provider attitudes towards quality assurance schemes on the basis that their sample was working farmers who were too busy to engage in more qualitative approaches, it was deemed necessary in this thesis to gain a deeper understanding of farm tourism issues by supplementing questionnaire data with semi-structured interviews. Although it has been difficult to encourage farmers to participate in an interview, by timing the interviews when farmers are perceived to be less busy this research has achieved a much greater depth than simply using a single method approach. This is considered a particular strength of this thesis. For example, in Chapter Six (section 6.3) quantitative questionnaire data allowed for the creation of a list of reasons why farmers have diversified into tourism, and interviews with business owners provided gravity to many of these responses. The use of semi-structured interviews has been successful in exposing some of the deeper issues that may limit farm-based accommodation as a sustainable diversification strategy for farmers in Dumfries & Galloway. A good example of this comes from an interview with Farmer N who revealed that the transference of agricultural capital into tourism resources involves risk, but unlike agricultural businesses, tourism enterprise owners receive little compensation for adverse events (FMD). In this case the farmer would have benefited financially from having most of his capital invested in stock rather than tourism. The richness of the data revealed through this interview could not possibly have been captured through a self-administered questionnaire. Similarly, one could not have provided an accurate general account of economic sustainability by relying on interview data alone. For instance many farm-based accommodation interviewees generated relatively high proportions of household income from tourism, and some of these interviewees provided employment for several people external to the family. It is only by combining the data from the questionnaire

surveys and the interviews that one can generate an accurate picture showing that most farm-based accommodation enterprises in the region generate a low, but important, source of income and that it is more common that the enterprise provides employment for the farm tourism owner only. From these findings one can therefore provide a more robust assessment of farm tourism as an economically sustainable diversification strategy for rural development.

Chapter Five has taken a more quantitative approach which reflects the fact that the NEP scale is a quantitative tool. To date, the NEP scale has not been used extensively in studies of visitors and is a novel way of investigating the ecological attitudes of visitors. The NEP is a tool that is used to summate responses in order to compare and contrast attitudes. It does not seek to understand the underlying variables that combine to form an attitude, it simply provides an indication of where one person or group of people lie in comparison to others in terms of their ecological positionality. As such, few studies using the NEP incorporate qualitative material in their analysis. In Chapter Five of this thesis attempts have been made to incorporate qualitative material in order to strengthen the application of the NEP, for example direct quotations from visitors and case studies (Mennoek Pass). Nevertheless, it remains primarily a quantitative effort. This is not to say that future research should continue in a similar vein. This research has shown that certain types of visitors appear to hold significantly higher pro-ecological attitudes than others and can be segmented based on the types of activities they pursue. The theory is that attitudes are a precursor to behaviour and therefore visitors with high pro-ecological attitudes can be expected to behave in a responsible manner. The next stage of this research might be to test this idea using a more appropriate qualitative approach such as participant observation.

The main challenges that this research has faced include finding enough visitors in some of the remote sampling locations to generate a large number of questionnaire returns. Although one could have stood in the town of Dumfries or Castle Douglas and handed out questionnaires to visitors and perhaps generated substantially more questionnaire returns, it was a necessity of this thesis that a sample of nature-focused visitors and general rural visitors were both reflected in the sample. In order to

capture nature-focused visitors it was necessary to select sites that could facilitate nature-focused activities and these tend to be outwith town locations in remote areas.

A further challenge has been establishing the extent of farm-based accommodation in the study region given the lack of available data. This information is important for assessing whether this form of structural diversification has been adopted widely in Dumfries & Galloway and provides an indication of post-productivism in the study region. There is no single source of information that provides these data, and therefore an extensive search using the internet and tourism brochures together with a snow-balling technique had to be conducted.

Generating more questionnaire responses from farm-based tourism operators was also a challenge, and although the return rates can be considered high it would have been advantageous to have received more. Some farm-based enterprise owners did feel that their tourism business was unlikely to be of interest for the study despite considerable effort to convince them otherwise. More positively, many of the randomly selected farm-based accommodation providers who were asked if they would give questionnaires to their guests were happy to contribute in this way. This helped to solve the impossible task of sourcing visitors who were staying in farm-based accommodation in the region.

Despite these challenges this research has been able to meet the aims of the thesis and has achieved this by using a robust, reliable and transparent methodological approach.

### **7.3 Conceptualising sustainable rural tourism development**

Two of the broad aims of this thesis are to consider the implications of the findings presented in Chapters Five and Six for the sustainable development of tourism in Dumfries & Galloway. Although sustainable development is an ambiguous concept and has been interpreted in diverse ways (Grainger and Purvis, 2004), there are three generally accepted holistic dimensions (environmental, social and economic) and these have been used in this thesis to probe the concept as it applies to rural tourism

in Dumfries & Galloway. The very essence of sustainability is the potential for a system to maintain or improve its functioning and the benefits derived from it (Mirovitskaya and Ascher, 2001). In other words, Lane (1994b) suggests that for tourism to be considered sustainable it ought to be viable in the long-term.

Under each of the holistic dimensions lurk diverse ways of interpreting sustainability and measuring its attainment. For instance, environmental sustainability can be assessed against the modes of transport used by visitors to reach a destination on the basis that some forms of transport, such as private cars, generally create more pollution per head than public transport (the exception being aeroplanes). Public transport is considered more sustainable (Roberts and Hall, 2001). Similarly, it is clear that service providers who reduce, re-use and recycle waste material are more environmentally sustainable than businesses that do not. Other analysts may choose to probe environmental sustainability through a life-cycle model or an environmental footprint approach (Johnson, 2003). The social dimension of the sustainability concept can be probed with reference to the education benefits from staying in and operating a farm enterprise or pursuing ecotourism activities. Social sustainability can also be demonstrated through the role that structural diversification can play in reducing isolation for dispersed accommodation providers in rural areas, assuming that isolation is something that providers wish to reduce.

This thesis has not taken the option of assessing farm-based tourism or ecotourism in Dumfries & Galloway against a predefined set of quantitative sustainable rural tourism indicators, but instead has aimed to highlight ways in which the findings may contribute towards sustainable rural tourism development. It is acknowledged that sustainability indicators can help to move debate beyond the rhetoric of sustainable tourism, but there remains a lack of studies using indicators to allow for comparison between regions and products (Blackstock *et al.*, 2006). Also, indicators often attempt to measure sustainability by reducing items or events into a single quantitative measurement, and while this allows for systematic measurement, it fails to capture the richness and diversity that may be present. For example, the percentage of accommodation providers who are members of the GTBS tells us nothing about why people are not joining the scheme, nor can it confirm or reject the hypothesis that non-members operate their business in an unsustainable fashion.

The critical point argued here is that there are various ways of gauging sustainability. This thesis does not claim to, nor has it tried to, cover all facets that may lead to a complete assessment of sustainable rural tourism development. For example, farm-based accommodation is just one type of rural accommodation and others also merit attention in assessing sustainability. There is no correct or universal model from which to measure sustainable rural tourism development. This thesis has attempted to address sustainability using the evidence presented along with recommendations made by others elsewhere (e.g. Blackstock *et al.*, 2006; Lanc, 1994b; Moscardo *et al.*, 1996). Nor are there any types of tourism that can truly claim to be sustainable, simply there are mechanisms available that attempt to keep impact to a minimum (Clarke, 1999). This claim is partially substantiated by the fact that tourism and recreation are fashion-related and what is popular now (e.g. adventure sports, France, authenticity, ecotourism, etc.) may not be fashionable, sought after or sustainable in the future. Thus it is difficult to determine what forms of tourism will be viable in the long term. Urry (2002) provides an example of this when recounting the rise and fall of the British seaside resort. In a more local example, Moffat used to be popular as a spa town but can no longer claim to derive most its custom from this status. Besides, travel for self-indulgent purposes has an environmental cost that can be avoided if one was not to travel. However, accepting that tourism and recreation will continue to grow globally and exert greater pressures on communities, resources and environments, the best that can be hoped for is to offset negative impacts and maximise benefits to 'host' communities. This is the premise of sustainable rural tourism.

#### **7.4 Ecotourism and sustainability in Dumfries & Galloway**

Ecotourism is both a type of activity and a philosophy that attempts to address issues of sustainable rural development. Yet seldom is its use in a Scottish or UK context explicit in its meaning and functions. This thesis addresses this shortfall and provides a critique of ecotourism ideology currently lacking in a Scottish context. It achieves this by assessing ecotourism in Dumfries & Galloway against some of the ideological principles commonly associated with the concept at the global level where it is most frequently, but not exclusively, discussed in relation to low income

economics. Definitions and critiques of ecotourism in the literature inform us that the following dimensions are regularly associated with the concept (Australian Commonwealth Department of Tourism, 1994; Blamey, 1997; Ceballos-Lascuráin, 1996; Fennell, 1999; Honey, 1999; Swarbrooke, 1999):

- Visitors have an interest in nature
- The experience involves education
- Takes place in relatively undisturbed/protected areas
- Contributes to conservation
- Benefits local people/ long-term benefits
- Is low impact/non-consumptive
- Is managed appropriately/ sustainably
- Involves cultural appreciation
- Typically small-scale
- Involves enjoyment/appreciation

As discussed before, sustainable rural tourism is not necessarily the same as ecotourism; however one finds considerable cross-reference with Lane's principles of sustainable rural tourism and the dimensions above. There are also similarities with Moscardo et al's (1996) notion of ecologically-sustainable accommodation (p.63-64). According to Lane (1994b: 103) sustainable rural tourism should aim to:

1. Sustain the culture and character of host communities.
2. Sustain landscape and habitats.
3. Sustain the rural economy.
4. Sustain a tourism industry which will be viable in the long term – and this in turn means the promotion of successful and satisfying holiday experiences.
5. Develop sufficient understanding, leadership and vision amongst the decision-makers in an area that they realise the dangers of too much reliance on tourism, and continue to work towards a balanced and diversified rural economy.

It is with reference to the specifics of ecotourism and Lanc's more broad sustainable rural tourism principles that this concluding chapter considers the implications of Chapters Five and Six.

In terms of supply, is ecotourism a sustainable strategy for Dumfries & Galloway and is it achievable given the natural resource base? The short answer is yes, but there are a number of aspects that currently limit the region from achieving this goal. These will be discussed later. On the positive side, it is concluded that the study region meets the conceptual requirement of having extensive areas of 'natural' and semi-natural environment that retain a diverse array of flora and fauna for visitors to enjoy (Ceballos-Lascuráin, 1996; Fennell, 1999; Honey, 1999). That said, the region is best known for its avian diversity with several bird populations of international and national importance, and in this respect can be considered a specialist ecotourism destination. The region may be therefore less appealing to generalists than some parts of the Scottish Highlands and Islands where a greater array of biodiversity has been developed for the ecotourism gaze. Some areas of Scotland are fortunate to have some important species with wide public appeal such as the resident population of bottlenose dolphins in the Moray Firth, whereas Dumfries & Galloway's ecotourism product is currently focused on the avian spectacle. That said, the Royal Society for the Protect of Birds (RSPB) is Europe's largest voluntary conservation organisation with over one million members (Everett, 1997; Jordan and Clarence, 2003) and therefore Dumfries & Galloway's internationally important habitats have the potential to attract a great number of enthusiasts. More could also be done to widen the region's ecotourism appeal by developing, in a sustainable way, some of the region's other wildlife assets. For example the region supports 20% of Scotland's red squirrel population.

Blamey (2001) has questioned how anthropogenic a landscape can be and still qualify as an ecotourism venue. It is argued here that ecotourism activities need not be constrained to strictly 'natural' areas. There is evidence of ecotourism activities taking place on agricultural land in the region (Red Kite feeding station, farm trail at Millairies Farm near Newton Stewart), which by rigorous ecological criteria is modified or disturbed land. However for the visitors who come to Dumfries & Galloway the landscape is viewed as 'natural' and represents an important contrast



with the urban areas where most permanently reside. Despite ecological debates on what is considered 'natural' or not it would appear that the rural environment of Dumfries & Galloway is likely to constitute a 'natural' environment to most visitors.

Secondly, the venues that support the region's current claim as a destination for ecotourism activity (Caerlaverock NNR, Wigtown Bay, Galloway Forest Park, Gatehouse of Fleet NNR, etc.) provide educational facilities and interpretation thus satisfying this crucial dimension of ecotourism (Burton, 1998; Diamantis, 1999; Fennell, 1999). There are two main functions of interpretation at ecotourism venues: the first involves satisfying visitor demand for information regarding natural and (often) cultural attractions. This coincides with what is considered the primary motivation for undertaking an ecotourism experience (learning about plants, animals and landscapes that are unique to an area). The second function is to change attitudes or behaviour in a pro-environmental way with a view to minimising negative impacts and engendering a more environmentally and culturally aware citizenry (Blamey, 2001). Indeed, there is empirical evidence from other studies to support the claim that interpretation at ecotourism sites can achieve this second function (Orams, 1997). Ecotourism development that incorporates an educational element, as evident in Dumfries and Galloway, has the potential to sustain the landscape and habitats of rural spaces and contribute actively to conservation. Conservation is one of Lane's (1994b) broad principles of sustainable rural tourism and it is therefore important to ensure that not only is the tourist respectful of the environment, but that the tourist is afforded opportunities to support conservation efforts (for example through subscription to environmental organisations).

Questions have been raised with regards to environmental education at ecotourism sites that it may preach to the already converted (Beaumont, 2001). Although it has been shown here that visitors who travelled to Dumfries & Galloway with the specific intention of pursuing a nature-focused activity did indeed hold the highest pro-ecological attitudes, it was also apparent that nature-based activities are pursued by other rural visitors with lower pro-ecological attitudes. The key challenge for environmental education is to ensure that it caters for the specialist and non-specialist alike. Visitors to rural areas in the UK, as demonstrated in this research, are likely to have a variety of interests and, whilst they can be segmented on the basis of their

intended activity, are not as singular or focused in their views as those who may visit more traditional or exotic, ecotourism sites. Education at ecotourism sites must fulfill a dual role of introducing the less ecologically aware to concepts promoting conservation and sustainability whilst reinforcing the views of the ecologically literate.

Of critical importance in realising the conservation benefits from interpretation at ecotourism venues is determining appropriate ways of delivering education. The evidence presented here leads to the conclusion that leaflets, in particular, are highly valued by visitors, consequently efforts to encourage pro-ecological attitudes and behaviour should be integrated into this type of medium. There is however a need for research to address the effectiveness of leaflets in transforming attitudes or behaviour in a pro-environmental way, and this would prove a constructive line of inquiry for future research. There is also the concern that this form of education may contribute to the issue of waste – what do people do with their leaflets when they get home? Current evidence points to personal (face-to-face) interpretation being effective in educating and stimulating attitude change (Armstrong and Weiler, 2002; Hughes, 1991; Moscardo, 1998; Orams, 1997) however with just 16% of visitors in this research viewing this type of interpretation technique as important its impact is obviously diminished. Nevertheless, personal interpretation is offered at many ecotourism venues in Dumfries & Galloway through organised events. Static interpretation and visitor/interpretation centres are appreciated more by visitors than personal interpretation (guided walks, etc.) and these too can be used to encourage pro-ecological behaviour.

Another essential dimension of ecotourism is that the location where activities take place should be managed in a sustainable way (Blamey, 2001; Diamantis, 1999; Fennell, 1999). Serious adverse impacts on the landscape and habitats will render ecotourism development unsustainable, yet it has to be accepted that tourism and recreation will have some impacts on habitats and landscapes in a trade-off with the wider economic and social benefits accrued from tourism development. The critical question must be is how much change is acceptable? In the case study of the Menzies Pass it was noted that the 'wild' camping that takes place has created environmental degradation and in addition there are few or no economic and social

benefits to the wider community. In this case one can only conclude that this type of tourism is unsustainable without the introduction of effective management. Although this is not an isolated case, interviews with managers of important ecological sites that currently act as ecotourism venues lead one to conclude that most sites are managed sustainably. Environmental degradation is not considered to be problematic given current levels of visitation, and reserve managers indicated that further visitation could be sustained within the carrying capacity of the sites they manage. This contrasts with some popular and easily accessible protected areas in Scotland, such as Loch Lomond and the Trossachs National Park, where shore erosion, congestion and vegetation removal have been highlighted as particular problems (Dickinson, 1996). From an ecological perspective Dumfries & Galloway appears to have benefited from comparatively low levels of visitation and this strengthens the region's claim as an ecotourism destination, although there is the dichotomous impact in terms of economics. Tourism and leisure day visits to Argyll, the Isles, Loch Lomond, Stirling and the Trossachs (tourist board area) is worth around £670m to the local economy, twice as much as Dumfries & Galloway (see Table 3.1). In the Highlands, tourism and day visits are worth nearly three times as much as Dumfries & Galloway and employ around 13,000 people, double the number employed through tourism in Dumfries & Galloway (VisitScotland, 2004c; 2006).

It is concluded that ecotourism activity can be sustained from a supply prospect. From a demand perspective this research is able to demonstrate that visitors, especially those with a specific interest in nature or those who consider themselves to be ecotourists, are unlikely to represent a major threat to ecological resources given present levels of visitation. With similar attitudes to the managers of nature sites in the region, most visitors in this research have indicated that the landscape, habitats and species have intrinsic value and ecological functions beyond their utilitarian use as tourism attractions as evidenced by responses to the NEP scale. For example, some 90% of all visitors sampled (N = 107) 'strongly agreed' or 'agreed' that plants and animals have as much right as humans to exist, 81% felt that when humans interfere with nature it often produces disastrous consequences and 88% conceded that the balance of nature is delicate and easily upset. Even though visitors who travelled to the region specifically to engage in a nature-focused activity expressed an overall mean NEP value (4.19) that was significantly higher than other rural

visitors (3.83), most visitors hold ecocentric attitudes to a greater or lesser degree. All visitors expressed strong acknowledgement that nature's balance was fragile although some general rural visitors were more anthropocentric in their views towards limits to growth and rejection of exemptionalism. Visitors at the lower end of the ecocentric spectrum ('light greens'?) may be encouraged to strengthen their environmental position through more effective interpretation at ecotourism venues.

The development of Dumfries & Galloway as an ecotourism destination is enhanced by the finding that many visitors have heard of ecotourism and are able to associate with the main facets of the concept. Some visitors even considered themselves to be ecotourists with this group expressing higher pro-ecological attitudes than those who did not classify themselves as ecotourists. While using terms such as 'ecotourism' is likely to be understood by many visitors to Dumfries & Galloway, decision-makers are more wary because of its growing stature as a form of global tourism, its association with so-called 'pristine' environments and the perception that visitors do not understand the concept. There is a need to educate decision-makers in Dumfries & Galloway in order to move beyond the main restrictive notion that ecotourism is something that can only be conducted in countries that retain significant reserves of unaltered habitat. Where ecotourism can be conducted is less important than what the concept aims to achieve in delivering a more sustainable industry and products, and in this respect it is similar to the concept of sustainable rural tourism. Decision-makers are right to be sceptical over branding the region as an ecotourism destination given that the concept is much wider than just wildlife watching, and as discussed in greater detail below, the region's tourism stakeholders can not yet realise its goal as an ecotourism destination. However, there are benefits to branding the region as such in the future given the global popularity of ecotourism and this could help to bring more overseas visitors to Dumfries & Galloway. Out of all the tourist board areas in Scotland, Dumfries & Galloway has the lowest number of overseas visitors (c.30,000). The benefits in attracting this broad segment are self-evident in that overseas visitors tend to spend more than domestic visitors (VisitScotland, 2004a).

Although this thesis has segmented visitors into different groups for the purpose of assessing ecological attitudes, essentially all rural visitors are similar in terms of characteristics although those with higher pro-ecological attitudes tend to be older.

Nature-focused visitors and self-classified ecotourists are already attracted to the region and form part of the population who choose Dumfries & Galloway as a destination to visit. Efforts to attract new visitors to the region should concentrate on the ecological significance of Dumfries & Galloway, because it is the visitors with a specific interest in nature that held the highest pro-ecological attitudes. To some extent the region already promotes this through the images presented in tourism brochures and the use of strap lines such as 'Dumfries & Galloway - Naturally You'll Love It', although the images used tend to concentrate on the landscape rather than the biodiversity. One potentially fruitful avenue is to target the publications of conservation/environmental organisations such as the RSPB and the Wildlife Trusts as this thesis has revealed that visitors who were members of similar organisations appear to express particularly high ecocentric attitudes.

The conclusions above relate to the development of ecotourism as an activity however it has also been argued that ecotourism needs to be critiqued from a wider perspective incorporating other facets of the tourism system. Whilst the region possesses the necessary elements for pursuing ecotourism activity such as visiting nature reserves and wildlife watching, one aspect that dilutes Dumfries & Galloway's claim as an ecotourism destination is the transport infrastructure and the heavy reliance on cars for reaching and travelling around the region. 96.3% of all visitors sampled used a car to reach and travel around the region, which is considerably higher than the 84% suggested by VisitScotland (2004a). This serves to highlight an unsustainable element of rural tourism in Dumfries & Galloway, an issue mirrored in other remote places around the UK and Europe: 71% of visitors to Highlands arrive by car, 81% in the Scottish Borders (see Table 3.1 for other locations in Scotland), 83% of visitors to the Lake District National Park arrive by car (Lake District National Park Authority, 2006). The high reliance on private transport is not an issue confined to Dumfries & Galloway, but according to VisitScotland statistics the region has the highest proportion of domestic visitors arriving by car compared to any other tourist board area in Scotland. Such a high reliance can have negative environmental impacts. Emissions from vehicles can have a detrimental effect on flora and fauna and thus threaten ecotourism attractions. It also contributes to atmospheric pollution, ozone depletion and climate change in addition to increasing congestion (Sharpley and Sharpley, 1997a). However, one has

to view these impacts in context. Dumfries & Galloway does have much lower visitation levels than many other regions of Scotland and visitors value the fact that congestion is not an issue in the region unlike areas such as Loch Lomond. Pollution from cars is therefore likely to be much lower than the Scottish Highlands which receives twice as many tourism and day trips as Dumfries & Galloway. Furthermore, around 25% of Dumfries & Galloway is under forestry or woodland and trees have the ability to absorb CO<sub>2</sub>, thus acting as a carbon sink, and therefore some of the negative impacts created from increased car use in the region can be offset to some degree (it is unlikely to achieve a carbon-neutral state). Nevertheless, for the region to be considered an environmentally friendly destination steps should be taken to address issues of transport and infrastructure with an aim of reducing reliance on private transport. This is a long-term goal and is unlikely to be achieved without a combination of different approaches: greater investment in public transport; restrictions on car access; taxation and pricing policies; a shift in national policies and effective marketing; and public awareness programmes (Roberts and Hall, 2001). The development and promotion of more cycle and path networks may be one practical way of encouraging more sustainable means of exploring the region, although visitors are still likely to arrive by car. One of Scotland's designated Long Distance Routes (footpath), the Southern Upland Way, is located within the region and research has shown that some accommodation owners provide a service where they arrange to pick-up and drop-off walkers thus reducing the need for visitors to use their own transport (Crichton Tourism Research Centre, 2004). Services like this could be encouraged among other accommodation providers in the region and help to reduce the local impact of high visitor car usage. Some ecotourism attractions in Dumfries & Galloway have also been proactive in encouraging visitors to utilise sustainable forms of transport. For example the Wildfowl and Wetlands Trust at Caerlaverock has a lower admission rate for anyone who arrives at the centre on foot, bike or by public transport. If guests are staying at the reserve's self-catering accommodation and arrive by train they are offered free transport to their accommodation.

However, accepting that high car usage to reach and travel around the region is likely to continue given the lack of an efficient public transport system, one has to consider other ways to compensate negative impacts. One realistic solution is to create an

organisation comparable with the non-profit making 'Tourism and Conservation Partnership' which has been effective in Cumbria since 1993. The aim of this partnership is to raise funds from visitors and tourism businesses to maintain and enhance Cumbria, facilitate improvements and promote awareness that responsible sustainable tourism can benefit fragile landscapes and secure a prosperous future for businesses. The partnership has raised nearly £1million through a well publicised 'visitor payback scheme' where businesses and visitors can donate money or become members. The Lake District and Tourism Partnership allow businesses to raise money for individual conservation projects close to where they operate, therefore the benefits are more evident to them and their visitors. The success of the scheme is very closely linked to the effort and enthusiasm of those people on the frontline, who are in regular contact with visitors. By linking tourism businesses with local conservation causes, businesses become more enthusiastic and feel a greater sense of ownership of the scheme, rather than viewing it as something detached from their business. Some of the projects currently supported in Cumbria include the conservation of the red squirrel population and the improvement and creation of sustainable footpaths. There is no reason why Dumfries & Galloway cannot adopt an analogous visitor payback scheme, perhaps with a more encouraging title like 'conservation shareholder scheme', where the income generated can be used for local projects such as planting trees to compensate and absorb carbon emissions from cars. A further doubt of the region's claim to be an ecotourism or environmentally friendly destination is raised by the fact that very few accommodation providers are members of Scotland's main environmental management scheme for the tourism industry (GTBS). Current membership in the GTBS is proportionally low in contrast to the total accommodation stock (2%). By comparison, in the Highlands approximately 12% of accommodation businesses are members of the GTBS.<sup>84</sup> Although many farm-based accommodation providers do participate in environmental practices they do not promote their green credentials. This prohibits visitors who express high pro-ecological attitudes and have a desire to stay in sustainable accommodation from doing so. Swarbrooke (1999) and others criticise the lack of evidence to verify the rise of the 'green tourist', but as long as there are only a few service providers

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<sup>84</sup> Accommodation businesses in the Highlands = 1,126 ([www.staruk.org.uk](http://www.staruk.org.uk)). Number of accommodation businesses in the Highlands that are members of the GTBS = 131 ([www.green-business.co.uk](http://www.green-business.co.uk)).

promoting or engaging in environmental management then it is improbable that the 'green tourist' as a force for change will ever be detected. Even though a proportion of visitors to Dumfries & Galloway hold high pro-ecological views and many regarded themselves as ecotourists they can not justifiably be defined as 'green tourists' since the region currently lacks the services to make this achievable. However, based on the findings presented in this thesis it can be concluded that many visitors, especially nature-focused visitors, have a propensity to consume green products. Accommodation providers should therefore advertise their environmental commitment in order to attract these visitors. Rather than seeking evidence of green tourists before engaging in appropriate practices, environmental sustainability should be supply led.

While the integration of GTBS criteria into the VisitScotland Quality Assurance scheme will undoubtedly increase the environmental sustainability of most accommodation providers in Dumfries & Galloway, at present farm-based accommodation can be considered to be particularly compatible with the concept of ecotourism for several reasons. Most farm accommodation operators currently engage in environmental management not only in relation to household management but also through their main occupation as farmers. Environmental regulations under the Single Farm Payment scheme are widely anticipated to deliver positive benefits in terms of biodiversity and aesthetics, which in the face of declining agricultural incomes and the necessity to generate additional income will provide opportunities for farmers to develop more ecotourism activities and accommodation on agricultural land. Compatibility with ecotourism is manifest in the finding that farm-based accommodation in the study region is typically small-scale in terms of the number of people enterprises can 'host' at any one time (51% offer  $\leq 6$  bed-spaces, 33% offer 7-12 bed-spaces). This complements the philosophy of ecotourism which advocates small group sizes in order to provide intimate and personal experiences (Blamey, 2001; Fennell, 1999). Furthermore, most farm-based accommodation enterprises in Dumfries & Galloway are located outwith the main populated settlements in remote and scenic areas where 'being close to nature' is important to guests (69%) and more attainable than staying in a hotel or other mass tourism complex. Farm accommodation enterprises are already integrated within the landscape of Dumfries & Galloway, and importantly, can offer accommodation with great character that has



been recycled from a prior use, thus reinforcing their environmental credentials. Additionally, the most popular form of accommodation existing on farms in the region (self-catering, 55%) is also the form of lodgings that visitors with the highest pro-ecological attitudes are inclined to choose. The second most common type of farm accommodation in the region is B&B and usually takes place within the owner's farmhouse. This social form of tourism can be educational and can lead to an enhanced appreciation of farming cultures which is likely to be dissimilar to the tourists' sphere of knowledge. Understanding other cultures is another dimension of ecotourism. This research has also shown that tourism development can assist in reducing the isolation felt by farmers and spouses working and living in remote locations in Dumfries & Galloway demonstrating the benefit which hosts can gain from tourism. According to Moscardo et al's (1996) criteria, farm-based accommodation in Dumfries & Galloway merits classification as an ecologically-sustainable and specialised form of rural tourism (see Section 2.5.3). It represents a specialist form of rural tourism in that: it provides a personal service with a small number of guests; provides an opportunity for guests to experience a rural lifestyle; makes use of traditional buildings, although not exclusively; offers instant access to the countryside; and, is typically owner-operated and not part of any chain or consortium. In terms of being an ecologically-sustainable form of rural tourism, this research has shown that farm-based accommodation in Dumfries & Galloway is typically small-scale, although it is acknowledged that large-scale accommodation enterprises can also be managed in a sustainable manner. It also provides self-employment opportunities in remote areas where few other opportunities exist, and also some external employment opportunities therefore benefiting the wider local community. In terms of distribution farm accommodation enterprises are spread throughout the region and not overly clustered, therefore it disperses impacts. Farm-based accommodation has special character in that it is located in a working farm environment and is therefore different from other forms of rural accommodation. The development of farm-based accommodation can also help to protect built heritage by recycling redundant cottages and outbuildings. Fundamentally, farm accommodation provision does not adversely impact on other industries or activities. Farm-based accommodation is also sustainable in that it is successful in maintaining the agricultural identity of farmers.

Furthermore, the sustainability of farm-based tourism is apparent from the fact that in the region many enterprises have been functioning for a long time (up to 35 years) despite the finding that most have developed in an *ad hoc* way without formal business goals. Although this implies long-term viability, where the development of farm-based tourism has been *ad hoc*, difficulties can arise resulting in businesses not achieving their full capabilities. Developmental difficulties can, however, be counteracted by utilising the expertise of development agencies such as Scottish Enterprise or advice centres such as the Scottish Agricultural College. For farmers, the main problem in establishing a farm accommodation enterprise in Dumfries & Galloway is generating the capital mandatory for investment. Whilst this is a challenge that most businesses face when starting, many farmers do have potential access to match-funding through government support schemes such as the Farm Business Diversification Scheme (FBDS). This public money is available only when farmers can meet certain criteria and can justify the need for services locally to a Project Assessment Committee (PAC). Despite this, very few farmers in this research made use of, or were successful in, receiving grant support for diversification into tourism, and as such, have not had to develop a formal business strategy to meet match-funding criteria. The biggest predicament related to this is that, when starting the business, many farmers were unsure of how to market their enterprise (59%) and a lesser but still high proportion noted that the lack of tourism training was problematic for them (25%). The FBDS process identifies and addresses these needs as part of funding criteria, thus helping to create a more focused and sustainable diversification strategy. Funding opportunities are undoubtedly important, but this research suggested that more focused business-related training may help farmers enter tourism more successfully.

Despite the availability of government support schemes such as the FBDS many farmers in this research did not utilise grants because they lacked the personal capital to match the grants. For cash-poor farmers not willing to undertake personal loans, the only option is to develop the tourism enterprise over a long period by investing personal capital when it becomes available. Additionally, several farmers in this research regarded match funding criteria as too restrictive and bureaucratic. From the PAC perspective capital investment demonstrates the farmers' commitment and therefore are likely to be more enthusiastic in making the business sustainable in the

long-term. Even if matching capital can be accrued not all applicants will be successful in securing grant support because the FBDS is competitive. Some areas, as shown in this thesis, already have a well developed accommodation sector and the need for further facilities may not be justified based on what is being proposed. There are also issues of planning consent, which many enterprise owners had difficulties attaining, and not all projects may be deemed appropriate by the local authority, especially those located in designated areas. Furthermore, the PAC will not recommend approval where they consider that the project applied for could be funded from within existing financial resources. Therefore it is possible that some farmers have not used grant support because they have the financial ability to fund the tourism enterprise themselves, despite suggesting otherwise.

Farmers wishing to access the competitive FBDS could enhance their probability by differentiating the farm accommodation enterprise from others in the locality. This might be achieved on the basis of proposing high quality accommodation which is presently undersupplied in Dumfries & Galloway or promoting 'unthemed' attractions on the basis of existing farm characteristics such as countryside access and farm animals. While most enterprise owners in the study region dissuade visitor participation in agricultural work due to fears over liability, risk adverse activities such as guided walks and farming demonstrations could help to differentiate enterprises while providing a unique educational encounter for visitors.

Quality is a crucial issue for visitors, decision-makers and also many of the current farm-based accommodation providers, yet not all enterprise owners are members of VisitScotland's Quality Assurance scheme. Those receiving FBDS funding are required to join, but for most farm accommodation enterprises in Dumfries & Galloway, participation is voluntary. Around 66% of farm-based accommodation providers are Quality Assured under VisitScotland which is slightly below the Scottish average of 70% but high in comparison to similar national accreditation schemes in England and Wales (Deakin, 1997; Morris, 2002). In Yorkshire, Cumbria, Devon and Cornwall less than 42% of all farm-based accommodation is inspected. In this respect Dumfries & Galloway performs well although the Scottish Executive optimistically plans to raise participation rates to 90% (Scottish Executive, 2006). One of the obstacles to achieving this policy aim was evident from

interviewing farm-based accommodation providers. Participation in VisitScotland's QA scheme, although considered important, is also expensive for small-scale operators whose income from the tourism enterprise is marginal. This is undoubtedly one of the main reasons why a third of farm accommodation providers do not participate.

There are sustainability implications for the businesses who are not VisitScotland QA members, apart from the fact that quality is critical to farm-based accommodation consumers and VisitScotland accreditation provides the most prevalent indicator of quality transparency in Scotland. One of the main economic and promotional implications is that accommodation providers who are not QA under VisitScotland can not utilise the services of VisitScotland.com to advertise their enterprise. VisitScotland.com clearly have the resources to reach a global market through a range of different media (TV, radio, printed material, website, etc.) which is beyond the capabilities of most small-scale operators and many other promotional companies. In this respect participation is potentially beneficial. However, there are mixed feelings among farm-based accommodation providers in Dumfries & Galloway about the effectiveness of this Public Private Partnership (PPP) in generating business for them. Indeed, this research found that just 3% of farm accommodation consumers used VisitScotland.com to book their accommodation, therefore supporting the fraction of operators claiming this source is ineffective in delivering customers. It appears that many farm accommodation businesses in Dumfries & Galloway are withdrawing from the 'expensive' promotional services of VisitScotland.com and this will probably continue until it can be objectively demonstrated that this PPP is delivering significant custom to enterprise owners. However, farm accommodation enterprise owners in Dumfries & Galloway are likely to maintain their QA status through VisitScotland. In some ways the abandonment of VisitScotland.com among accommodation providers in the region has been beneficial. It has mobilized a number of enterprise owners in a sustainable grass-roots endeavour to gain better control over their own destiny. This is being achieved most notably through the establishment of ADGAP (Association of Dumfries & Galloway Accommodation Providers), although as discussed previously this is not an exclusive farm-based accommodation organisation.

A further implication of not being QA under VisitScotland is that farm-based accommodation providers and other forms of accommodation are excluded from participating in the GTBS or any other accreditation schemes operated by VisitScotland. This effectively alienates a proportion of accommodation providers from being officially acclaimed in attempting to mitigate their environmental impact. A more inclusive approach to help accommodation providers address environmental issues is to open the GTBS to all stakeholders regardless of whether they are QA under VisitScotland or not. This investigation has exposed that the cost of joining schemes like the GTBS represents a significant barrier to small-scale farm accommodation and therefore many are unlikely to join for this reason alone. However, there is also an impending necessity for objective research to determine whether participation in the GTBS brings extra business to participants. Some farm-based enterprise owners in the region who were part of the GTBS felt that it brought little in the way of extra custom, yet this thesis has shown that visitors to Dumfries & Galloway have the propensity to consume green products. However, accommodation choice is unlikely to be based on environmental credentials alone; location, value for money and quality are also fundamental variables. Where do environmental credentials come in this list for consumers? This would be a productive topic for future research, although it would need to be conducted in an area where there was a high proportion of GTBS accredited enterprises, e.g. Orkney.

This leaves the fundamental question of how to encourage more enterprise owners to join environmental accreditation schemes. It is argued in this thesis that environmental sustainability in tourism should not be a reaction to consumer demand but should be supply-led. It is a momentous challenge for key stakeholders to encourage small-scale enterprise owners to adopt a more sustainable approach given that many struggle to survive, however there are some ways in which the Scottish Executive and VisitScotland can prove their authentic commitment to confronting this issue. This might involve making participation in the GTBS free and the Scottish Executive offsetting the implementation costs against the environmental benefits accrued (i.e. reduction in CO<sub>2</sub>, less waste to landfill, energy efficiency savings, etc.). If this was deemed unfeasible economically, an alternative approach would be to make the highest levels of the GTBS (silver, gold) indefinitely free (based on regular audits) to enterprise owners therefore providing an economic incentive to increase

environmental sustainability. Perhaps a third approach might be to waive QA fees where an enterprise has demonstrated the highest environmental standard achievable.

A fundamental element of both ecotourism and sustainable rural development is that tourism should sustain the rural economy, yet it is neither likely to achieve this on its own nor is it wise to create too much reliance on one sector (Hall and Page, 1999). Increasingly rural communities are deemed to be sustainable only when there is a diverse economic base (Lane, 1994b; Roberts and Hall, 2001). There can be no doubt that tourism has helped to diversify Dumfries & Galloway in the face of agricultural decline. Fundamentally, an essential element of sustainable rural tourism development and ecotourism is the ability to generate income. Although most ecotourism attractions in the region are free to access and therefore do not contribute direct income, the 'natural' environment and the by-products of this (peace and quiet, recreational opportunities, etc.) are central to why most people come to the region and are therefore responsible for much of the tourism and recreation income generated.

As a structural diversification strategy, the provision of accommodation on farms is not a widespread phenomenon in Dumfries & Galloway with just 4.4% of main agricultural holdings engaged in this form of pluriactivity, however it is likely that this proportion will rise with further policy pressures to diversify. Given the current level of farm participation in tourism accommodation this form of diversification does not represent a major solution to the problems facing agricultural communities in the region. In most cases the income generated does not transform the economic situation for farmers, and in this respect the findings are similar to studies elsewhere. However, the low proportion of household income that is generated through tourism (55% generate  $\leq$ 10% of household income through accommodation provision) is viewed by most farmers in Dumfries & Galloway as representing a good financial move (76%) and essential for the survival of the farm (33%). Crucially, diversification into tourism has played an important social function in sustaining the cultural identity of around 110 farmers - another of Lane's (1994) principles of sustainable rural development. While diversification into tourism has created around 110 self-employment opportunities in remote locations where few other opportunities exist, and has empowered mainly female spouses (74%) leading to financial and

social autonomy, the wider impact of this structural pathway has been negligible in the region. Nevertheless, tourism is crucial to those who have diversified and brings both social and economic benefits.

One significant barrier that restricts farm-based accommodation providers from developing a more effective product is the lack of specific farm-based accommodation networking in the region. This conclusion derives from the finding that several regions in England have well established networks that not only give farm tourism a strong identity, act as a social network and help to promote the product in a professional way, but also increase their stakeholder negotiation status. In comparison the farm tourism product in Dumfries & Galloway is weak with no brand identity or network to support stakeholders. Promotion is typically through a variety of different channels with no single collection of farm-based accommodation providers in Dumfries & Galloway. This research has revealed, as discussed above, that farmers and other rural accommodation operators are concerned enough about their tourism business to mobilize support and establish a strong network, however the question remains whether farm-based accommodation providers feel they have a strong and well-defined product to differentiate it from other rural accommodations, or indeed if they consider this beneficial.

## **7.5 Final comments**

In conclusion, Dumfries & Galloway can begin to progress towards sustainable rural tourism development by developing the region's potential as an ecotourism destination. Visitors attracted to nature and wildlife demonstrate an ecological consciousness essential as a precursor to pro-environmental behaviour, and based on this confirmation are unlikely to consciously jeopardize the region's 'natural' assets. However, a number of challenges have been identified and need to be addressed before the region's status as an ecotourism destination can be justified. Some rudiments of the regional tourism system, such as transportation and infrastructure, represent particular problems for realising sustainable rural tourism development. It has to be accepted that a radical reformation of the transportation infrastructure is not probable and therefore Dumfries & Galloway's best prospect of moving towards

sustainability, in this regard, is to mitigate or offset negative impacts while encouraging more sustainable ways of exploring the region. This is not occurring at the present moment. It is concluded that farm-based accommodation conforms to several dimensions of ecotourism and principals of sustainable rural tourism development, although there are also critical issues that need to be addressed. Among these are the deficiency of any brand identity or specific networking, and the reality that diversification into tourism, for the majority, does not fundamentally transform the economic circumstances for farming communities facing agricultural restructuring. There are solutions that can assist with these challenges, many of which can be attributed to *ad hoc* development, including the establishment of a robust stakeholder network and brand identity, further engagement with economic development bodies and also alignment with ecotourism development in the region.

This research helps to address the gap in the literature with regards to farm-based tourism in Scotland, yet more research is required to generate an overall picture of this structural diversification strategy and form of rural tourism. The adoption of a mixed method approach to the study of farm-based tourism marks a departure from the more quantitative questionnaire-based studies common within the literature. Some commentators have suggested that farm-based accommodation is a sustainable form of rural accommodation although the evidence for this has not been forthcoming. Unlike much farm-based tourism research, this study has critiqued farm-based accommodation from a sustainability perspective that moves beyond issues of economics to include social and environmental parameters and in this respect adds significantly to the literature.

The research addressing the ecological or environmental attitudes of visitors is still in its infancy and more research is required to provide a wider picture across Scotland and in different locations. This research represents one of the first attempts at using the New Ecological Paradigm (NEP) scale as a way of measuring visitor attitudes in Scotland and therefore is exploratory in nature. Further use of this scale at a national level will allow for comparisons to be made and further test the reliability of the NEP in visitor studies. Potential future research could set out to determine supply-side attitudes towards the environment and compare these with visitor attitudes. While responses to the NEP provide a theoretical indication of behaviour future research



should test whether responses match behaviour at tourism sites. This research could involve a mixed method approach using NEP questionnaires and participant observation at tourism locations.

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## **APPENDIX A**

### **Contents**

#### **Visitor Questionnaire**

#### **Farm-based accommodation enterprise owner questionnaire 2003**

#### **Farm-based accommodation enterprise owner questionnaire 2005**

#### **Farm-based accommodation visitor questionnaire**

## Visitor Questionnaire

# Visitor Survey



UNIVERSITY  
of  
GLASGOW



Crichton  
UNIVERSITY CAMPUS

Thank you for taking the time to fill in this questionnaire, your views are much appreciated. Please only fill in this questionnaire if you have not filled in one already. Please try and complete all sections of questionnaire as this will help with the analysis. All survey respondents will remain anonymous and the information will only be used in a student research project.

## Section A. About Your Visit

**Question 1** Which of the following best describes your visit today? *Please tick one of the following*

Day trip from home     On holiday     On business     Visiting friends or relatives

Other reason - please describe .....

**Question 2** Are you a permanent resident in Dumfries & Galloway?     No - please continue with questionnaire

Yes - please go to **Section C**

**Question 3** How many nights will you be spending in Dumfries & Galloway? .....nights

**Question 4** Are you visiting the region...     Alone     With partner     With family (including children)

With friends    Other- please describe.....

**Question 5** During your visit how important are EACH of the following?

		Extremely important				Not important at all
Exploring the region	(please tick one box)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Being close to nature	(please tick one box)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Escaping the urban environment	(please tick one box)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Escaping daily stresses/ relaxing	(please tick one box)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Learning about local culture	(please tick one box)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Section B. About Your Accommodation Choice while in Dumfries & Galloway

**Question 1** While in Dumfries & Galloway, which of the following types of accommodation will you use?

None     Friends or relatives home     Small-scale bed & breakfast     Hotel/ guesthouse     Tent

Caravan     Motorhome     Self-catering cottage     Youth Hostel

Other - please describe.....

*Please continue to next page*

**Question 2** Have you ever stayed in farm accommodation (e.g. in a farmhouse or farm cottage) ?  Yes

No

**Question 3** Would you consider using farm accommodation in the future?  No  Yes

**Question 4** How important are EACH of the following when choosing accommodation?

		Extremely important					Not important at all
Value for money	(please tick one box)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
An isolated location	(please tick one box)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmentally friendly accommodation	(please tick one box)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Close to amenities	(please tick one box)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality assurance ratings (star ratings)	(please tick one box)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Near to public transport	(please tick one box)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Question 5** Have you heard of the Green Tourism Business Scheme?  Yes  No

**Question 6** If a particular accommodation provider advertised as being environmentally friendly, but was slightly more expensive than another accommodation provider, which accommodation provider would you go for?

The slightly more expensive environmentally friendly accommodation provider

The less expensive, and less environmentally friendly accommodation provider

## Section C. About Your Leisure Activities while in Dumfries & Galloway

**Question 1** Did you visit the region with the intention of pursuing a particular leisure activity?

No  Yes - please describe what activity.....

**Question 2** During your visit to the region, which of the following activities will you take part in? (please tick all that apply)

Nature study  Golf  Fishing  Cycling  Hill walking  Short walks  Climbing

Visiting heritage attractions (castles, abbeys, etc.)  Shooting/ hunting  Water sports  Wildlife watching

Long distance walking  Visiting farm attractions  General sightseeing  Nature photography

Other activities while in Dumfries & Galloway - please describe.....

## Section D. Nature Attractions

**Question 1** Are there any particular animals or plants that you are specifically interested in seeing while in Dumfries & Galloway?

No  Yes - please describe which ones.....

**Question 2** Are you interested in viewing farm animals?  Yes  No

Please continue to the next page

**Question 3** When visiting nature-based attractions, such as country parks, nature reserves, woodlands, etc, how important are EACH of the educational materials listed below?

Extremely important

Not important at all

Leaflets about the attraction	(please tick one box)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A ranger/guide service	(please tick one box)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Organised talks	(please tick one box)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Visitor /interpretation centre	(please tick one box)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interpretation boards	(please tick one box)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Question 4** Have you heard of the term 'ecotourism' before?  Yes - please continue  
 No - please go to **Section E. About You**

**Question 5** Which of the following do you associate with 'ecotourism'? *please tick all that apply*

- Low environmental impact     Urban environments     Rural environments     Rainforests  
 Natural environments     Observing plants/animals     Environmental education     Pristine environments  
 Polluted environments     Sustainable development     Benefits local communities  
 Conserves natural environments     Marketing gimmick to attract visitors

**Question 6** Do you consider yourself to be an 'ecotourist'?  Yes     No     Unsure

## Section E. About You

**Question 1** What age category do you fall under?  Under 30 years old     30 - 39     40 - 55     >56

**Question 2** Where is your permanent place of residence? Country.....  
 City/town/village.....

**Question 3** What educational qualifications do you have?  High-school qualifications     Degree/diploma  
 None     Postgraduate degree     Vocational qualifications

**Question 4** What gender are you?  Female     Male

**Question 5** How many times have you visited Dumfries & Galloway in the last 10 years?

- First time     1 - 3 times     4 - 6 times     7 - 10 times     More than 10 times

**Question 6** What is the main form of transport you have used to travel around the region?  Bicycle

- Private car     Hired car     Bus     Train    Other.....

**Question 7** What month did you visit Dumfries & Galloway? .....

**Question 8** Are you a member of any environmental/ conservation organisations?  Yes     No

*Please continue to the next page*

## Section F. Your Environmental Views

**Question 1** Listed below are statements about the relationship between humans and the environment. For EACH one, please indicate whether you STRONGLY AGREE, MILDLY AGREE, are UNSURE, MILDLY DISAGREE or STRONGLY DISAGREE with it.

Please tick one box for EACH statement below

	Strongly agree	Mildly agree	Unsure	Mildly disagree	Strongly disagree
We are approaching the limit of the number of people the earth can support	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Humans have the right to modify the natural environment to suit their needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When humans interfere with nature it often produces disastrous consequences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Human ingenuity will insure that we do NOT make the earth unliveable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Humans are severely abusing the environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The earth has plenty of natural resources if we just learn how to develop them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plants and animals have as much right as humans to exist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The balance of nature is strong enough to cope with the impacts of modern industrial nations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Despite our special abilities humans are still subject to the laws of nature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The so-called "ecological crisis" facing humankind has been greatly exaggerated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The earth is like a spaceship with very limited room and resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Humans were meant to rule over the rest of nature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The balance of nature is very delicate and easily upset	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Humans will eventually learn enough about how nature works to be able to control it	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If things continue on their present course, we will soon experience a major ecological catastrophe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Question 2** When in your normal place of residence, how often do you recycle EACH of the items of waste listed below?

	<input type="checkbox"/> Never	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Frequently	<input type="checkbox"/> Always
Newspapers/ magazines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Glass bottles/ containers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Waste food (Composting)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aluminium cans	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Question 3** If facilities were available, would you recycle any of your waste while on holiday (bottles, cans, etc)?

No  Yes

**Question 4** Do you consider yourself to be an environmentally friendly person?  Yes  No  Unsure

**Question 5** Please consider EACH of the following environmental issues and indicate your concern by placing a tick in the appropriate circle (1 = extremely concerned, 5 = not concerned at all)

	1	2	3	4	5		1	2	3	4	5
Loss of trees and hedgerows	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Disposal of hazardous waste	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Losing Green Belt land	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Foot & Mouth Disease	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fumes and smoke from factories	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Pollution in rivers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Traffic congestion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Pollution in bathing waters/beaches	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use of pesticides, fertilisers, chemicals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Traffic exhaust fumes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Using up the UK's natural resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Loss of plants and animals in the UK	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Acid rain	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Ozone depletion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Household waste disposal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Tropical rainforest destruction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Growing genetically modified crops	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Climate change/ Global warming	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

END OF QUESTIONNAIRE - THANK YOU

**Farm-based accommodation enterprise owner questionnaire 2003**



# Farm-based Accommodation Survey



Thank you for taking the time to fill out this questionnaire. Be assured that all respondents will remain anonymous and the information will NOT be passed to any other party or organisation. Please return the questionnaire using the pre-paid envelope within one week.

## Section A. About You

- Q1. Please indicate what age you are?  less than 30 years old  
 30 - 39 years old  
 40 - 54 years old  
 Over 55 years old

- Q2. Please indicate your gender  Male  Female

- Q3. How long have you had your current tourism business?  years

## Section B. About Your Farm Business

- Q1. What type of farm do you have?  Cattle & sheep (LFA)  Specialist beef (LFA)  
 Specialist sheep (LFA)  Mixed  
 Dairy  Cereal  
 Other.....

- Q2. What size is your farm?  Hectares

- Q3. Which of the following best describes you?  Owner occupier  Tenant farmer  
 Mixture of both

- Q4. What type of farming do you practice?  Organic  Non-organic (traditional/conventional)  
 In the organic conversion process

- Q5. If you currently practice 'Non-Organic' agriculture, are you considering organic conversion?  Yes  
 No

- Q6. If you practice 'Organic' agriculture (or currently converting), how important to you were EACH of the following statements when deciding to practice organic agriculture?

	Very important					Not important at all
To get a better price for my produce	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
To receive grants/subsidies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
To farm less intensively	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
To produce quality food	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
To be more environmentally friendly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
To use less harmful chemicals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
To be wildlife friendly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**Q7. Are you involved in any of the following schemes?** (please tick all that apply)

- Organic Aid Scheme       Habitats Scheme       Countryside Premium Scheme  
 ESA Scheme       Rural Stewardship Scheme       Farm Woodland Premium Scheme  
 Farm & Conservation Grant Scheme

What other schemes, if any, are you involved with?

**Q8. Is any part of your agricultural holding covered by any of the following Designated Areas?**

- Special Site of Scientific Interest       Nitrate Vulnerable Zone       Special Protection Area  
 Special Area of Conservation       National Scenic Area       National Nature Reserve

**Q9. In the financial year 2001 -2002, how much income (after tax) did your farm business generate (Excluding tourism and other off-farm income)?**

Please be assured that this information will remain strictly confidential and will not be used for any other purpose other than THIS research project

- £0     £0 - £5000     £5001 - £10,000     £10,001 - £20,000     £20,001 - £30,000  
 £30,001 - £50,000     more than £50,000

## Section C. About Your Decision to Diversify into Tourism

**Q1. In what year did you diversify into tourism?** \_\_\_\_\_

**Q2. Please consider EACH of the following statements and indicate how influential they were in your decision to diversify into tourism?**

	<i>Very influential</i>				<i>No influence at all</i>
To generate additional income	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To change my career/ get an new job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To reduce my agricultural activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The BSE outbreak	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To involve family members	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The foot-and-mouth outbreak	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Q3. Please tell me about any other reasons why you diversified into accommodation provision on your farm. Please use the space below.**

Q4. Has diversifying into tourism been a good move FINANCIALLY?  Yes  No  Unsure

Has diversifying into tourism been a good move PERSONALLY?  Yes  No  Unsure

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## Section D. About The Support You Have Received

Q1. When deciding to diversify into tourism did you receive any advice from any of the following organisations? (please tick all that apply)

- Local Tourist Board  Scottish Enterprise  Local Council  Scottish Executive  
 Scottish Agricultural College  Other organisation/body please specify.....

Please comment on the advice you received. What was good and what was not so good?

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## Section E. About Your Tourism Business

Q1. Who operates the tourism business on your farm? (please tick one of the following)

- I principally operate the tourism business  
 My partner and I jointly operate the tourism business  
 My partner operates the tourism business  
 Other (please specify).....

Q2. What type of farm-based accommodation do you offer? (please tick all that apply)

- Bed & breakfast  Self-catering  Bed & breakfast  Hostel  
 Caravan/campsite  Other (please specify).....

Q3. Who many bed-spaces/ pitches do you have? Bed-spaces (please write-in number)   
Caravan/camping pitches (please write-in number)

Q4. Is your accommodation Quality Assured under the Scottish Tourist Board?  Yes  
 No

Q5. Are you a member, or considering membership of the Green Tourism Business Scheme?  Yes  No

Q6. Please indicate what sources you use to advertise your accommodation business. (Please tick all that apply, and if possible give the names)

- I do not advertise my accommodation business  Official Tourist Board publications  
 Magazines/brochures (other than official tourist board) Which ones?.....  
 The internet Which ones?.....  
 Fliers  Radio/TV  Other? (please specify).....

Q7. In YOUR experience, how interested are your accommodation guests in farming?

- My accommodation guests are VERY INTERESTED in farming  
 My accommodation guests are SLIGHTLY INTERESTED in farming  
 My accommodation guests are NOT INTERESTED in farming  
 Unsure

**Q8. How important do you think EACH of the following are in attracting visitors to your accommodation?**

	Very important	Not important at all
Being situated on a working farm	<input type="checkbox"/>	<input type="checkbox"/>
Being close to nature	<input type="checkbox"/>	<input type="checkbox"/>
Experiencing a rural way of life	<input type="checkbox"/>	<input type="checkbox"/>
High quality accommodation and service	<input type="checkbox"/>	<input type="checkbox"/>
Remoteness of the accommodation	<input type="checkbox"/>	<input type="checkbox"/>
Lots of wildlife to see	<input type="checkbox"/>	<input type="checkbox"/>
A variety of activities to do	<input type="checkbox"/>	<input type="checkbox"/>

**Q9. Do you have any educational material about the farm or wildlife, such as leaflets or interpretation boards, which visitors to your accommodation can read?**  Yes  No

**Q10. Do you involve your guests in farm duties while they are staying in your accommodation?**  Yes  No  Sometimes

**Q11. If you did not diversify into tourism do you think that the farm would be viable financially?**  Yes  No  Unsure

**Q12. Please indicate what proportion of total household income comes from the tourism business.**  
(please tick one of the following boxes)  
 less than 20%  20% - 40%  40% - 60%  60% - 80%  More than 80%

**Q13. Are you planning to expand your tourism business in the future?**  Yes  No  Unsure  
 If you answered 'Yes', please describe what you plan to do

**Q14. What was your occupancy rate for the season 2001 -2002?** Please write in the approximate %

## Section F. About Your Visitors/Guests

**Q1. Please estimate what percentage of your guests come from the following countries**

Scotland  %      England  %      Other UK  %      Overseas  %

**Q2. Which of the following types of visitors does your accommodation predominantly attract?**  
 Families with children  Couples  Single individuals  Other.....

**Q3. In your experience what activities do your visitors do while in Dumfries & Galloway?**

Visit heritage attractions  Hill walking  Wildlife watching  General sightseeing  
 Farm walks  Fishing/shooting  Other activities?.....

**END OF QUESTIONNAIRE**

**THANK YOU** for taking the time and effort to fill-in this questionnaire. Please check that all questions have been answered. If you experience any difficulties while filling-in the questionnaire please don't hesitate to contact me (Steven Gillespie) on 01387 702053. Please return the questionnaire using the pre-paid envelope provided within one week of receiving the questionnaire.

**Farm-based accommodation enterprise owner questionnaire 2005**

# Farm-based Accommodation Survey



Thank you for taking the time to fill out this questionnaire. The information generated through this questionnaire will only be used in a research project. Be assured that all respondents will remain anonymous and the information will NOT be passed to any other party or organisation. Please return the questionnaire using the pre-paid envelope within one week.

If you have any difficulty in filling this questionnaire please don't hesitate to contact me (Steven Gillespie) on 01387 702053 anytime.

## Please Answer All Questions

**Question 1** Please indicate the ownership characteristics of your tourism business  
(please tick one category from the list below)

- Sole proprietor     Partnership of two or more family members     Limited company  
 Partnership including family members     Other type of ownership.....

**Question 2** Please indicate your age category

- less than 25 years old  
 25 - 34 years old  
 35 - 44 years old  
 45 - 54 years old  
 55 - 64 years old  
 65 or over

**Question 3** What type(s) of accommodation do you offer?

- B&B  
 Self-catering  
 Campsite/ caravan site  
 Hotel/Guesthouse  
 Other type of accommodation

**Question 4** Which of the following statements applies to you?

- I inherited the tourism business     I started the tourism business

**Question 5** How long have you been involved in the current tourism business?

Please write in the number of YEARS

**Question 6** Including yourself, how many people does the tourism business provide employment for?

- One     Two     Three     Four     Five     Six - Nine     Ten or more

*please turn over*

**Question 7 Including yourself, how many employees are family members?**

Please write in number

**Question 8 Please describe why you got started in the tourism business**

**Question 9 What are your three main business goals?**

1. ....
2. ....
3. ....

**Question 10 How important were EACH of the following goals when getting started in the tourism business?**

(For EACH statement please tick the appropriate box ranging from 'not important at all' to 'very important')

	Not important at all					Very important				
To be my own boss	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To keep my family together	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To keep this property in the family	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To live in the right environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To support my/our leisure interests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To enjoy a good lifestyle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To make lots of money	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To gain prestige	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To meet interesting people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To provide a retirement income	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To provide me with a challenge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To permit me to become financially independent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To support my agricultural activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Question 11 When starting your tourism business, were you motivated in any way by an interest in nature conservation?**

Yes

No

**What about an interest in conserving heritage?**

Yes

No

If you answered 'Yes' in question 11 please indicate your specific interests

*please turn over*

**Question 12** Please indicate your view on EACH of the following statements by ticking the appropriate box ranging from 'totally agree' to 'totally disagree'

	Totally Agree					Totally Disagree				
It is crucial to keep the business profitable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I want to keep the business growing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Enjoying the job is more important than making lots of money	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In this business customers cannot be seperated from personal life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
This business currently meets my performance targets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It should be run on purely business principles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I would rather keep the business modest and under control than have it grow too big	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My personal/family interests take priority over running the business	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eventually the business will be sold for the best possible price	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
This business is highly seasonal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I come into daily contact with customers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is hard to seperate work and family life in a tourism business	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I want to present a good public/corporate image	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Delivery of a high-quality product or service is a high priority	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Question 13** Are you are member of any of the following schemes? (please tick all that apply)

- VisitScotland Quality Assurance Scheme     Green Tourism Business Scheme  
 David Bellamy Conservation Awards     Hospitable Climates  
 Association of Dumfries & Galloway Accommodation Providers

**Question 14** Do you carry out any of the following environmental practices?

- Follow water conservation procededures     Yes     No  
 Follow a recycling programme for materials     Yes     No  
 Educate your guests on conservation matters     Yes     No  
 Eliminate non-organic chemicals     Yes     No  
 Set specific targets for waste reduction     Yes     No  
 Set specific targets for energy conservation     Yes     No  
 Use alternative, non-polluting energy sources     Yes     No

**Question 15** Are you a member of any of the following conservation-oriented groups?

- RSPB     Scottish Wildlife Trust     Local wildlife/ conservation group  
 Greenpeace     WWF     Wild Scotland     Friends of the Earth  
 Other

**Question 16** What type of agriculture do you practice?     Conventional     Organic

- In the organic conversion process     Mixture of both organic and conventional  
 Biodynamic

**Question 17** How much land do you own/manage?

numberof hectares

 ha

*please turn over*



**Question 18** What level of formal education have you attained?  Trade qualifications  
 High school qualifications  None  Post-graduate degree  College diploma  
 Undergraduate degree

**Question 19** In terms of the tourism business, how important are EACH of the following family-related goals for you?

(For EACH statement please tick the appropriate box ranging from 'not important at all' to 'very important')

	Not important at all	Very important
Prevent disharmony among family members	<input type="checkbox"/>	<input type="checkbox"/>
Share all key decisions with the spouse or family	<input type="checkbox"/>	<input type="checkbox"/>
Train the children for future ownership of the business	<input type="checkbox"/>	<input type="checkbox"/>
Provide family members with jobs	<input type="checkbox"/>	<input type="checkbox"/>
Share the work equally with my spouse	<input type="checkbox"/>	<input type="checkbox"/>
Pass on the family business to children/family	<input type="checkbox"/>	<input type="checkbox"/>
Earn enough to support family	<input type="checkbox"/>	<input type="checkbox"/>
Elevate out family position in society	<input type="checkbox"/>	<input type="checkbox"/>
Ensure the family has lots of free time together	<input type="checkbox"/>	<input type="checkbox"/>

**Question 20** What gender are you? (the main operator of the tourism business)  Female  
 Male

**Question 21** What are the first digets of your postcode? DG

**Question 22** What type of farm do you have?  Specialist sheep (LFA)  Specialist beef (LFA)  
 Mixed farm  Cattle & sheep (LFA)  Other.....

**Question 23** Are you involved in any of the following schemes?  
 ESA  Rural Stewardship Scheme  Organic Aid Scheme

**Question 24** What aspects of the tourism business give the most satisfaction?

**Question 25** What are the difficult aspects of having a tourism and agricultural business?

**Question 26** Please estimate what percentage of your total household income comes from your tourism business  
 Less than 5%  5% - 10%  11% - 25%  26% - 50%  
 51% - 75%  76% - 100%

**END of QUESTIONNAIRE**  
**THANK YOU FOR TAKING THE TIME TO FILL-IN AND RETURN THIS QUESTIONNAIRE**

## **Farm-based accommodation visitor questionnaire**

**Please only fill in this questionnaire if you have not completed one already**

## About your visit to Dumfries & Galloway

**Q1. Is this your...**

Main holiday of 2003

An additional holiday

Other (please specify).....

**Q2. How many nights will you be spending in Dumfries & Galloway?**

Please write the number of nights

**Q3. Who are you travelling with?**

Please tick one of the following

I am travelling alone

I am travelling with my partner

I am travelling with my family (including children)

I am travelling with friends

Other (please specify).....

**Q4. During your visit to Dumfries & Galloway how important are EACH of the following**

On a scale from 1 to 5, 5 being 'not important at all' and 1 being 'very important', please indicate your view by ticking the most appropriate box (please answer each of the listed items)

	Very important			Not important at all	
Exploring the region	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Being close to nature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Escaping the urban environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meeting interesting people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Escaping daily stresses/ relaxing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Experiencing a rural way of life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Learning about local culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## About your Accommodation choice

**Q1. How many times have you stayed in farm-based accommodation while on holiday in Dumfries & Galloway?**

First time     1-3 times     4-6 times     7-10 times     More than 10 times

**Q2. How did you find your accommodation?**

Tourist Information Centre     Owners website

VisitScotland.com     Word of mouth     Tourist brochures for the region     Other.....

**Q3. How important are EACH of the following when choosing your accommodation?**

	Very important			Not important at all	
Value for money	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
An isolated location	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmentally friendly accommodation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tourist Board Ratings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Closeness to amenities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Close to public transport	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Q4. What type of farm accommodation are you staying in?**

- Self-catering cottage  Farmhouse B&B  Caravan/campsite  Other.....

**Q5. How important was it that your accommodation was situated on a working farm?**

- Very important  Important  Relatively unimportant  Not important at all

**Activities**

**Q1. Did you decide to visit dumfries & Galloway with the intention of pursuing a particular activity?**

- No  Yes - What was this activity?.....

**Q2. Which, if any, of the following activities will you pursue while in the region? (please tick all that apply)**

- Nature study  Short walks  Long distance walking  Hill-walking  Nature photography  
 Visit farm attractions  Cycling  General sightseeing  Fishing  Golf  
 Watersports  Visit heritage sites (castles, etc.)  Wildlife watching  Hunting/shooting  
 Other activity.....

**About You**

**Q1. What age are you?**

- Under 30 yrs old  30-39  40-55  56 or over

**Q2. Where is your normal place of residence?**

Country  Village/town/city

**Q3. What is your highest educational qualification?**

- Diploma  High school qualifications  None  
 Degree  Postgraduate degree  Other

**Q4. What gender are you?**

- Female  Male

**Q5. Are you a member of any environmental/conservation organisations/groups?**

- No  Yes - which ones?.....

**Q6. How interested are you in farming?**

- Very interested  Interested  Not very interested  
 Not interested at all

**Your Views**

**Q1. Please consider EACH of the following statements and indicate your view**

	Strongly agree	Mildly agree	Unsure	Mildly disagree	Strongly disagree
Dumfries & Galloway is an unspoilt tourism destination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Staying in farm accommodation is a unique experience	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Farmers are custodians of the countryside	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Farm-based accommodation is an environmentally friendly form of accommodation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tourism does not negatively impact on the environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dumfries & Galloway is an isolated region of Scotland	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Q2. In your opinion, how important are EACH of the following**

	Very important				Not important at all
Protecting nature and wildlife	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conserving local customs and traditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Minimising environmental damage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**END of Questionnaire. Thank you for taking the time to fill out this questionnaire - your effort is much appreciated. Please use the pre-paid envelope provided to return your completed questionnaire.**

## **APPENDIX B**

### **Contents**

**Internal consistency and dimensions of the New Ecological Paradigm (NEP)  
scale**

## B.1 Internal consistency and dimensions of the New Ecological Paradigm (NEP) scale

Establishing the internal consistency and dimensions of the NEP could be justifiably placed within the findings section since this task can not be completed without generating the data to analyse. Although other users of NEP scale report their findings on internal consistency and dimensions of the NEP, results are sample specific and often have deviating results (Dunlap *et al.*, 2000). For this reason and for the purposes of presenting the findings in this chapter, it is important to report on the internal consistency and dimensions of the NEP for the sample of 107 visitors surveyed.

A high level of internal consistency or reliability is considered an essential prerequisite for combining a set of items into a single measure such as the NEP (Dunlap *et al.*, 2000; Gliner and Morgan, 2000). So this analysis begins by reviewing the corrected item-total correlations for the 15 statements that make up the NEP (Table B.1). The corrected item-total correlations range from a low of 0.11 to a high of 0.56.

**Table B.1** Corrected item-total correlations and Cronbach's Alpha for NEP items

NEP item	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1	0.37	0.75
2	0.27	0.76
3	0.40	0.74
4	0.35	0.75
5	0.30	0.75
6	<b>0.11</b>	0.77
7	0.24	0.76
8	0.46	0.74
9	0.49	0.74
10	0.56	0.73
11	0.33	0.75
12	0.37	0.75
13	0.40	0.75
14	0.36	0.75
15	0.51	0.73

With the exception of NEP item 6 and its low corrected item-total correlation of 0.11 all others are reasonably strong. Cronbach's coefficient Alpha, which assesses how well a set of items (or variables) represent a single unidimensional latent construct, provides strong indication that the NEP scale represents a single measure ( $\alpha = 0.76$ ).<sup>1</sup> However, where variables in a scale lower the value of Cronbach's Alpha it has been recommended that these should be removed since this affects the reliability (Field, 2000). Dunlap *et al.* (2000) never encountered this problem with their sample. However in the Dumfries & Galloway sample NEP item 6 had a negative impact on the reliability of the scale because of the low corrected item-total correlation (0.11) of this specific item. Removing NEP6 increases the reliability of the scale which is reflected in a higher Cronbach's Alpha value ( $\alpha = 0.77$ ). The results presented in Chapter Five are subsequently based on a model representing 14 of the 15 NEP items. Removing NEP 6 from the model obviously impacts on the corrected item-total correlations, and the new figures are shown below in Table B.2. No other NEP items needed to be removed from the model since Cronbach's Alpha, or the reliability of the scale, would not be improved from 0.77. Based on this evidence the 14 NEP items can be treated as constituting an internally consistent measuring instrument.

**Table B.2** Corrected item-total correlations of NEP items with NEP 6 removed

NEP item	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1	0.34	0.77
2	0.29	0.77
3	0.41	0.76
4	0.34	0.77
5	0.33	0.77
7	0.29	0.77
8	0.47	0.75
9	0.52	0.75
10	0.55	0.74
11	0.33	0.77
12	0.39	0.76
13	0.41	0.76
14	0.31	0.77
15	0.52	0.75

<sup>1</sup> Cronbach's coefficient Alpha ranges from 0, indicating a completely unreliable test with totally random scores, to 1 for a completely reliable test (Flick, 2003). When data have a multidimensional structure, Cronbach's alpha will usually be low.

## B.2 Factor Analysis used in Chapter Five

Internal consistency was tested further through Factor Analysis, or more specifically Principal Components Analysis (PCA) (Dunlap, *et al.*, 2000). Factor analysis attempts to identify underlying variables or factors that explain the pattern of correlations within a set of observed variables (Pearce, 2005). It is used in data reduction to identify a small number of factors that explain most of the variance observed in a much larger number of manifest variables. It is claimed by its developers that the NEP scale measures a single dimension and this claim is supported by evidence generated from PCA (Dunlap *et al.*, 2000). Some researchers who have used the older New Environmental Paradigm to measure environmental orientation noted that the scale measures several dimensions and therefore could not be considered one-dimensional (Albrecht *et al.*, 1982; Geller and Lasley, 1985; Uysal *et al.*, 1994). Where the scale is found to measure more than one dimension, or factor, it may be appropriate to create sub-scales based on the factors that emerge.

Testing Dunlap *et al.*'s claim of unidimensionality, PCA with varimax rotation was conducted on the fourteen NEP items. The first point to note is that the sample size used in the analysis was found to be adequate and a good basis on which to continue.<sup>2</sup> Because of the sample size, Field recommends that factor loading values of 0.512 or higher are retained to explain the resultant factors (Field, 2000: 440). This recommendation was therefore adopted and the PCA procedure resulted in the presence of four different factors explaining 57.7% of variance (Table B.3).

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<sup>2</sup> To check the adequacy of the sample size the Keyser-Meyer-Olkin (KMO) measurement was used which is expressed in a value ranging from 0 to 1. A higher value presents a good basis on which to proceed. In this study, the KMO value was 0.71 indicating a satisfactory sample size.



**Table B.3** PCA of 14 NEP items (rotated)

NEP item	NEP Facet	Emerging Factors			
		1	2	3	4
1	Limits to growth	0.79			
15	Possibility of an eco-crisis	0.72			
11	Limits to growth	0.71			
13	Balance of nature	0.52			
14	Anti-exemptionalism		0.70		
10	Possibility of an eco-crisis		0.69		
4	Anti-exemptionalism		0.68		
3	Balance of nature			0.72	
7	Anti-anthropocentrism			0.68	
9	Anti-exemptionalism			0.66	
5	Possibility of an eco-crisis			0.57	
2	Anti-anthropocentrism				0.73
12	Anti-anthropocentrism				0.58
8	Balance of nature				0.57
Eigenvalue		2.2	2.0	2.0	1.8
Percentage of variance		16.1	14.5	14.4	12.7

Dunlap et al's own analysis also produced four factors and like the results above, each of the factors contained two or more hypothesised facets of the NEP. Factor one contains three different facets, two of items however relate to limits to growth. Most of the variance in the analysis is explained by factor one (16.1%) although the second and third factors also explain relatively similar amounts of variance. Factor two primarily explains anti-exemptionalism although one item relating to the possibility of an eco-crisis facet is also present. The third factor represents four items each from a different facet. This factor explains a similar amount of variance to factor two. The factor explaining the least amount of variance is factor four (12.7%). While this factor primarily explains sentiments towards anti-anthropocentrism it also contains one item addressing the balance of nature.

The NEP can therefore be treated as multi-dimensional. Chapter Five will use the sub-scales and the overall mean NEP responses to compare and contrast the ecological attitudes of visitors to Dumfries & Galloway. Factor one will be named 'limits to growth' as this factor contained two items of this facet, factor two will be known as 'rejection of exemptionalism' for the same reason, factor three is named

'the fragility of nature's balance' as this component is most highly correlated with this factor, and factor four will be named 'anti-anthropocentrism' on the basis of high correlation and the presence of two items representing this facet.

