The Economic Impact of Wildlife Tourism in Scotland
THE ECONOMIC IMPACT OF WILDLIFE TOURISM IN SCOTLAND

International Centre for Tourism and Hospitality Research

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Scottish Government Social Research
2010
The views expressed in this report are those of the researcher and do not necessarily represent those of the Scottish Government or Scottish Ministers.
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1 EXECUTIVE SUMMARY

1.1 The net economic impact of wildlife tourism is £65 million, with 2,763 FTE jobs in existence because of the activities of wildlife tourism in Scotland. Net economic impact is highest in the Highlands and Islands region (£32 million and 1,386 FTE jobs).

1.2 In total, 1.12 million trips are made each year to or within Scotland for the primary purpose of viewing wildlife. 56% of these trips are made by domestic (UK) tourists. £276 million is spent on these trips, with 75% spent by domestic tourists.

1.3 With 0.63 million domestic tourism trips, 5.2% of all domestic tourism trips to Scotland are being primarily motivated by wildlife. 6.3% of domestic tourism nights and 7.4% of domestic tourism expenditure in Scotland is primarily motivated by wildlife.

1.4 In addition, 0.41 million trips are made by wildlife day visitors, with £14 million of expenditure.

1.5 There is uncertainty regarding our estimates of overseas tourism trips, nights and expenditure, but the central estimate is that 0.08 million trips are made to Scotland by wildlife overseas tourists (3.1% of the total), spending 0.72 million nights in Scotland and £54 million. Spending by overseas wildlife tourists therefore makes up a significant minority of total wildlife tourism spending in Scotland.

1.6 Regionally, wildlife tourism is concentrated in the Highlands and Islands (with 50% of wildlife trips, 45% of wildlife tourism nights and £124 million of expenditure by wildlife visitors. The West Coast and Islands, Loch Lomond & Trossachs is the second most important region for wildlife visitors, with 23% of trips and nights, and £65 million of wildlife visitor expenditure.

1.7 This research sub-divides those visitors who are primarily motivated by wildlife into three groups according to whether they are motivated by viewing wildlife on land (terrestrial), at sea (marine) or on the coast (coastal). Of these three divisions, spending by terrestrial wildlife visitors is the largest (£114 million), with spending by coastal wildlife visitors of £100 million and by marine wildlife visitors of £63 million.

1.8 Net economic impact by type of wildlife tourism shows that terrestrial wildlife tourism has a net economic impact of £27 million with 1,136 additional FTE jobs because of terrestrial wildlife tourism. Marine wildlife tourism has a net economic impact of £15 million, with 633 additional FTE jobs. Coastal wildlife tourism has a net economic impact of £24 million with 995 additional FTE jobs.

1.9 Largely because of the additional expenditure made on accommodation and other goods and services on longer trips, net economic impact is dominated by tourism (with visitors staying overnight) rather than day visits (without an overnight stay). Wildlife day visitors lead to a net economic impact of just £3 million and around 140 FTE jobs, but tourists have a net economic impact of £62 million and 2,623 FTE jobs.

1.10 Wildlife tourism is a more complex market than simply classifying tourists as being either primarily motivated by wildlife or not. Tourists encountered at
wildlife sites and by tour operators ranged from being highly involved and motivated by wildlife watching to it being a substantial but not exclusive interest and finally to it being a casual and passing interest for the day. Wildlife operators see the majority of their visitors as combining a strong interest in wildlife watching with other activities, such as walking, cycling, touring, sightseeing, photography, history, culture and visiting distilleries, which may make up the primary purpose of their visit.

1.11 Operators claim that their clients are a diverse range of customers, but that a noticeably large segment is comprised of middle-aged, empty-nest, professional and middle-class couples who enjoy experiences in nature and are looking for new interests to follow. Other client groups include overseas visitors, families and a recent growth in domestic (Scottish) clients. Many such tourists belong to organisations such as the Wildlife Trusts and RSPB who also influence their decision to visit Scotland. Operators and observations reveal a number of people with a ‘new interest in wildlife’ instigated by either life stage (usually empty nesters) and/or television programmes, especially Springwatch.

1.12 Wildlife watchers often referred to their preferred independent style of travel and their ‘DIY’ method of wildlife tourism whereby they would travel with binoculars and sometimes a telescope and cameras, and be on the lookout for any wildlife watching opportunities such as walking in nature reserves or along the coastline. There was general consensus that in order to capitalise from this market and avoid untold disturbance to species and habitats, operators need to stress how much easier it is to see focal species with the help of a guide.

1.13 Findings in this report also show that wildlife tourism has been growing in recent years and that industry opinion is that it will continue to grow in the future. Developments such as the media coverage of wildlife in popular television programmes, increasing environmental awareness and a move away from long-haul destinations is thought to have helped the wildlife tourism sector weather the effects of the recession, but also show its potential for future growth.

1.14 The SWOT analysis conducted as part of the study was drawn from workshops and interviews with actual and potential tourists and businesses involved in the wildlife tourism industry and points to themes that could be further considered in this sector. The SWOT analysis indicates that further consideration would be useful in the areas of strategic management, national level marketing, infrastructure, product development strategies, resource and visitor management and quality standards within the wildlife tourism industry. In addition, the research indicated that there are industry perceptions of problems with national level marketing and support for wildlife tourism. Recommendations therefore include points on the strategic management of the sector and improved communication of activities between public sector agencies and industry.
2 INTRODUCTION

2.1 This report gives results from the “Economic Impact of Wildlife Tourism in Scotland” project undertaken by the International Centre for Tourism and Hospitality Research at Bournemouth University for the Scottish Government and Scottish Natural Heritage.

2.2 The principal aim of this study is to assess the economic impacts of those tourists who make a trip to or within Scotland with the intention of watching wildlife as the main reason for their visit. For the purposes of the study, wildlife tourism has been defined as:

‘Tourism with as its primary purpose the viewing, studying and/or enjoying of Scottish wildlife (animals, plants and other organisms). This definition includes wildlife watching holidays, wildlife boat trips, guided walks, visits to wildlife parks and sanctuaries marine aquaria, and the watching of marine wildlife from terrestrial viewpoints. It excludes activities where the interaction with wildlife is incidental to the experience and consumptive forms of wildlife tourism.’

2.3 Wildlife tourism can also be viewed in terms of the different types of species and experiences that attract visitors. For the purposes of this study, wildlife tourism has also been divided into three categories:

• **Terrestrial wildlife tourism**, where visitors are primarily motivated to view, study and/or enjoy wildlife at inland locations.

• **Marine wildlife tourism**, where visitors have a primary motivation to view, study and/or enjoy marine mammals from a boat.

• **Coastal wildlife tourism**, where visitors have a primary motivation to view, study and/or enjoy wildlife on the coast. This is a blurred overlap between terrestrial and marine wildlife tourism, and includes wildlife tourists who may travel on boats to view seabirds along the coast as well as those that view marine wildlife from vantage points on land.

2.4 VisitScotland defines a tourist trip as ‘a stay of one or more nights away from home for holidays, visits to friends or relatives, business/conference trips or any other purposes except such activities as boarding education or semi-permanent employment’. However, for the purposes of this study, day visitors and their economic impact are also included separately.

2.5 The following definitions are used in this study:

• **Wildlife day visitors** are those visitors who make a trip that does not involve an overnight stay, and who make that trip primarily because of wildlife.

• **Domestic wildlife tourists** are domestic (United Kingdom) residents who make a trip involving staying one or more nights (according to the VisitScotland definition above), and make that trip primarily because of wildlife.

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1 Consumptive forms of wildlife tourism are where the wildlife is consumed, such as fishing and hunting.
• **Overseas wildlife tourists** are resident outside the UK, and make a trip involving at least one night, and make that trip primarily because of wildlife.

These three definitions are combined in the following ways:

• **Wildlife tourists** are the combination of domestic wildlife tourists and overseas wildlife tourists.

• **Domestic wildlife visitors** are the combination of wildlife day visitors and domestic wildlife tourists.

• **Wildlife visitors** are the combination of all three categories, wildlife day visitors, domestic wildlife tourists and overseas wildlife tourists.

2.6 The definition used to define the primary motivation of visitors is to firstly ask visitors directly as to the main reason for their visit, with ‘to see wildlife’ as one of several options. Visitors who chose to declare this as the main reason for their visit are classified as being wildlife visitors. There is, however, a great deal of overlap between motivations to enjoy the countryside and to view wildlife. Those visitors who chose ‘to enjoy the countryside’ as their main reason for visit are also classified as being primarily motivated by wildlife if they also declared in another question that one of five different aspects of wildlife was essential or very important to their visit.

2.7 This report proceeds as follows. The next section (3) outlines the primary research methods employed in the study, discusses issues related to the measurement of tourism numbers and expenditure values and the methodology of economic impact assessment. Section 4 provides a brief review of studies undertaken in similar contexts in Scotland. Section 5 provides results for the economic impact assessment, section 6 discusses market trends in wildlife tourism in Scotland, and section 7 provides a SWOT analysis of the wildlife sector in Scotland. Following this, a summary of findings (section 8) is provided that synthesises results from the more detailed sections of the report.

2.8 Further details of the quantitative surveys undertaken as part of this project are provided in Annex 1, and summaries of the qualitative research are provided in Annex 2.
Acknowledgements

The assistance of all those who took part in fieldwork as part of this project is gratefully acknowledged, including the individuals and organisations listed here as well as anonymous respondents to surveys.

Colin Murray, Anstruther Pleasure Trips
Libby Urquhart, Arch Network
Andy Jackson, Tom Jackson and Graeme Coward, Ardnamurchan Charters
Andrew Bruce Wootton, Atholl Estates
Kirsty Sharratt and John Woods, Birdwatching and Wildlife Club
Steve Green, Bowles Green
Felicity Martin, Catkin Press
Esther Threfall, Cats Protection
Wendy Mattingley, Cluny House Gardens
Philip Dean and Martina Oriskova, Corrour Trust
Linzi Seivwright, Deer Commission Scotland
Pam and Arthur Brown, Discover Mull
Ian Hay, East Grampian Coastal Partnership
Sarah Pern, Ecoventures
Tony Lightley, Chuck Cuthbert, Lucy Hadley and Paul Hibberd, Forestry Commission Scotland
Peter Hizet, Gemini Explorer
Colin McClean, Glen Tanar Estate
Jon Mercer and Angela Mercer, Glenloy Wildlife
David Duncan, Grant Arms Hotel
Nick Davies, Hebridean Whale Cruises
Pete Murch and Donald Riddell, Highland Safaris
Libby Weir Breen, Island Holidays Plus
Jeremy Hastings, Islay Birding
Jim Michie, Loch Shiel Cruises
Dr Kathy Velander, Napier University
Dr Martin Kitching, Northern Experience Wildlife Tours
Mark Henrys and Hannah Thompson, Northern Light Charters
Pete Cairns, Northshots
Peter Edmondson and Emma Edmondson, Press Main Cottages
Jonathan Willett, Red Kite Tours
Mel Jarron and Marie Thoms, the RSPB, Loch Garten
Sarah and Steve Sankey, Orcadian Wildlife
Ian Robertson, Scottish Country Sports Tourism Group
Polly McPherson, Scottish Estate Business Group
Maren Ebeling, Scottish Natural Heritage
Tom Brock, the Scottish Seabird Centre
Fiona Hutton, Scottish Wildlife Trust (Loch of the Lowes Visitor Centre)
James Fairbairns and Richard Fairbairns, Sea Life Surveys
Colin Aston, Sea.fari Adventures (Forth)
Tony Hill and Iain Hill, Sea.fari Adventures (Oban)
Peter Fowler, Sea.fari Adventures (Skye)
Sally Dowden, Speyside Wildlife
Richard Cooke, Springwell Holidays
Amy Wellens, SYHA
Richard Pinn and Sarah Pendergrass, VisitScotland
Iain Thomson, Walkfree Breakfree Ltd
Alice Mains, Whale and Dolphin Conservation Society
Charlie Cornelius, Wild Green Travel
Ben Mardall, Wild Scotland
Ian Macleod, Wild West
Jeremy Usher Smith, Zoo-lutions
Duncan Bryden, tourism consultant
Erica Bower, tourism consultant


3 METHODOLOGY

3.1 This study is underpinned by results from six primary research elements, where data was gathered to help inform the report. Fieldwork for these studies was undertaken from March 2009 to November 2009.

1: Quantitative Survey of Domestic Tourists

1.2 A postal survey of tourists who have previously visited Scotland was conducted. The questionnaire for the main wave of this survey was distributed in May 2009 to 15,000 households across the UK, with 2,620 responses. This survey gives an unbiased estimate of the proportion of domestic tourists visiting Scotland who do so because of wildlife, and represents the first stage in estimating the volume and spend of wildlife visitors to Scotland. Full details of this survey are contained in Annex 1.

2: Quantitative On-Site Survey

1.3 A quantitative on-site survey was conducted from August to October 2009. It gives an estimate of the numbers of day visitors who are motivated by visiting wildlife relative to the numbers of domestic tourists who are motivated in the same way. This, when combined with the results from the postal survey, gives an unbiased estimate of the numbers and spend of wildlife day visitors. It also gives more detailed expenditure on wildlife visitors’ spending and additional evidence on their motivation to visit Scotland and to visit wildlife. Full details of this survey are contained in Annex 1.

3: Qualitative Research with Operators

1.4 In order to provide an evidence base for findings about the strength and direction of wildlife tourism in Scotland, interviews and three workshops were conducted with operators in Scotland from April 2009 to November 2009. This research identifies key opportunities of and threats to wildlife tourism in Scotland. Ten in-depth interviews were held, and there were 53 participants in the workshops. Further details of these interviews and workshops are contained in Annex 2.

4: Qualitative Research with Wildlife Tourists

1.5 A participant observation technique was employed to provide deeper answers to questions relating to wildlife visitor motivation than can be gained from other forms of research. This research was conducted with the assistance of wildlife attraction operators. Further details of these participant observations are contained in Annex 2.

5: Qualitative Research with Potential Wildlife Tourists

1.6 Focus groups were held with wildlife enthusiasts in the UK who had either not visited Scotland before, or who had not visited for several years. Key questions
of this analysis relate to the reasons why they have not recently visited Scotland, and opportunities that may exist for Scotland to attract this important potential market. Further details of these focus groups are contained in Annex 2.

6: Business Survey

3.7 A survey of wildlife tourism businesses in Scotland was conducted for the purpose of obtaining certain data on employment patterns for use in the economic impact assessment. This survey also included a range of questions that inform other parts of this report, such as business attitudes to the current market situation and future opportunities and threats. 76 responses were received from wildlife attractions, public bodies and accommodation providers.

Methods of Analysis

3.8 The results from the primary research elements have been combined and synthesised in assessments that aim to provide a robust economic impact assessment of wildlife tourism in Scotland as well as providing outputs related to the market trends and the position and potential of the sector. The postal and on-site surveys are combined, with the use of data from the United Kingdom Tourism Survey (UKTS, see VisitBritain, VisitScotland, Visit Wales and the Northern Ireland Tourist Board, 2009; VisitScotland 2009). This begins with estimates from the postal survey of the proportion of domestic tourists to Scotland that are primarily motivated by wildlife (‘wildlife domestic tourists’, top left of Figure 1). This is combined with data from the UKTS to provide an estimate of the number of domestic tourists who are primarily motivated by wildlife.

3.9 The on-site survey is used to estimate the proportion of day visitors who are primarily motivated by wildlife (‘wildlife day visitors’) to wildlife domestic tourists, which is then multiplied by the estimate of the total number of wildlife domestic tourists, to reach an estimate of the total number of wildlife day visitors.

3.10 Data from the business survey on overseas tourists to domestic visitors is used to inform estimates of the numbers of overseas tourists who are primarily motivated by wildlife (‘wildlife overseas tourists’) in a similar way, by taking the proportion of overseas tourists to domestic visitors and multiplying by the estimates of the number of domestic wildlife visitors. Because this business survey takes no account of motivations, but relies on estimates of customer numbers, estimates of wildlife overseas tourists are reduced as visitors who have travelled longer distances to Scotland and visit a wildlife site are less likely to be primarily motivated by wildlife and more likely to be undertaking a wildlife activity as part of a longer trip that has different motivations.
3.11 Estimates of nights spent on trips and of expenditure are derived in a similar fashion, with the representative and unbiased postal survey being used as a way of informing the overall level of domestic tourism trips and expenditure, and ratios from the other surveys being used to estimate the number of trips and expenditures of wildlife day visitors and wildlife overseas tourists to wildlife domestic tourists to give total values for these.

**Economic Impact**

3.12 The economic impact assessment provides results relating to the economic contribution and impact of wildlife tourism as a sector in Scotland. This includes the synthesis of expenditure estimates from the quantitative surveys, estimates of the economic value that wildlife tourism brings to Scotland, estimates of the impact of additional wildlife tourism, and estimates of employment in wildlife tourism related activities. These economic impact results are detailed in section 5 of this report.

**Market Trends**

3.13 Market trends relating to the recent and possible future trends in wildlife tourism are related in section 4 of this report. This draws upon evidence from operators.
through interviews and the quantitative survey to give a broad view from the industry about where they believe it is likely to be going in the near future.

**SWOT Analysis**

3.14 The outputs from the range of primary data collection exercises provide the additional evidence base necessary to build upon existing knowledge of the wildlife tourism market and sector in Scotland and provide a clear focus for an analysis of Scotland’s wildlife tourism potential. A SWOT (strengths, weaknesses, opportunities and threats) analysis synthesises these results to provide a structured view of where wildlife tourism is at the moment and what opportunities and threats exist for the future, from the viewpoint of businesses and visitors. The SWOT analysis is contained in section 7 of this report.

**Measuring Economic Impact**

3.15 The assessment of the economic importance of tourism spending has a lengthy literature, beginning with estimation of multipliers in the 1970s (e.g. Archer 1973; 1977), with a lengthy development of the estimation of multipliers from input-output models (e.g. Gartner and Holecek 1983; Fletcher 1989; Wanhill 1994; Archer 1996). The methods for calculating input-output multipliers are well documented and have resulted in a vast number of studies at national and local levels (see Ministry for the Environment, New Zealand 2004; and the Scottish Government 2008 'industry multipliers' section for good on-line examples of multiplier estimation). Note that economic impact estimation is distinct from economic valuation (e.g. see Lee, Lee, Mjelde, Scott and Kim 2009) which attempts to measure the value that users and others attach to (typically, environmental) resources.

3.16 A number of issues have arisen related to the use of multipliers from such economic impact studies. Relevant issues are (i) in the calculation of expenditure; and (ii) in the estimation of multipliers.

3.17 Expenditure calculations can differ, particularly for local impact studies, in the definition of tourism (e.g. does it include day visitors or business travellers), in the scope of expenditure (normally, all expenditure in the destination is included, but sometimes different expenditures are treated differently; expenditure on particular items is excluded in some studies) and in the measurement (e.g. the method of sampling; the detail of expenditure questions asked in surveys).

3.18 Differences in the use of multipliers are summarised by recent studies (Dwyer, Forsyth and Spurr 2004; Wilson, Thilmany and Winter 2007) that make the distinction between the economic contribution of tourism and its economic impact.

3.19 Economic contribution is similar to measuring income provided by an industry. This normally counts all income paid to employees, earned as profits or paid as taxes to establish the earnings of each industry, called gross value added (GVA). When estimating the economic contribution of a demand side activity such as tourism, the normal industry definition cannot be used as tourists
purchase products from a variety of different industries, and their spending accounts for only a part of those industries’ sales.

- The direct contribution of tourism expenditure is calculated by adding up the income generated in each industry from which tourists purchase products. A part of each industry’s GVA is therefore attributed to be ‘generated by’ or ‘dependent on’ tourism expenditure.

- Each industry, however, also purchases inputs, and earnings are generated in firms that supply those inputs, and that supply inputs to those input producing firms, and so on throughout the entire supply chain of the industry from which tourists are purchasing. The earnings generated in this supply chain can be calculated and summed, which calculates the indirect contribution of tourism expenditure.

- The direct and indirect contributions can then be summed to produce the economic contribution of tourism. This includes all income, in whatever industry it is earned, that can be attributed to tourism expenditure. The direct plus indirect approach has the notable benefit that if the contributions of all demand activities are added up, they will match the supply side definition of an economy’s GVA. The direct and indirect contribution can be calculated by multiplying tourism expenditure by a direct plus indirect (‘type I’) multiplier. Type I employment multipliers can be used to calculate the employment that is generated by tourism expenditure.

3.20 Economic impact is a means of capturing the changes that take place in an economy as a result of tourism spending. While the same direct and indirect stages can be included, as the direct impact and indirect impact, the measurement of economic impact differs from economic contribution in four ways:

- The concept of how tourism spending changes an economy has some difficulties. It is easier to imagine the changes that result from additional tourism spending, because economic impact of all tourism expenditure assumes that there is no tourism expenditure to start with, clearly a hypothetical situation in most cases where economic impact is calculated, and describes the effects that tourism expenditure has in terms of income and employment.

- Induced impacts need to be included, for as workers and owners (and the government) gain income from the direct and indirect stages, they purchase more products for their own consumption. These induced impacts can be added to direct and indirect impacts, and can be calculated by use of a ‘type II’ multiplier.

- Displacement (see paragraphs 3.21 to 3.25 below) must be included where tourism spending is likely to increase prices in an economy.

- Additionality (see paragraphs 3.26 to 3.28 below) must be taken into account where some tourist expenditure would have occurred anyway (it is not additional). Wildlife tourism may, for example, attract tourists to Scotland who would have visited Scotland anyway for another reason.

3.21 Displacement can be summarised as the effect that tourism spending has on raising prices for tourism related products, which in turn deters some tourists who would have spent money in the destination. This can be viewed from the supply side and demand side.
3.22 On the supply side, displacement requires that in order to increase output, firms must incur higher costs in hiring additional workers or expanding infrastructure. This is greater the more that:

- additional workers must be hired who already have jobs elsewhere,
- there are profitable uses for other resources – land, buildings, vehicles, etc.,
- demand is concentrated in a peak season where facilities are already used at or near full capacity.

3.23 Displacement is likely to be lower where:

- a high level of local unemployment means that most of the skills required for operation can be found from the unemployed labour force,
- additional workers are hired from outside the local area without pushing up wage rates,
- other resources have little or no other use; this might be the case for land in an area where brownfield sites are available but would not be used in another industry,
- demand falls outside of the peak season at times where tourism related firms have spare capacity and when seasonal workers can be retained at the same, or lower, wages that they are paid in the peak season.

3.24 On the demand side, displacement depends on how tourists react to increases in prices, so that displacement will be greater where tourists are more responsive to prices. This is likely to be where:

- a destination offers a product very similar to products being offered elsewhere,
- other destinations are easily accessible to the tourism market being served by the destination in question,
- the type of tourism in question is readily substitutable with non-tourism activities. In the case of wildlife tourism in Scotland, this might mean that wildlife tourists from the rest of the UK might react to an increase in prices by switching to wildlife activities at or near home rather than taking a wildlife holiday in Scotland.

3.25 When considering displacement in a Scottish context, a further complexity is to what extent displacement in one part of Scotland will lead to substitution by visitors not away from Scotland but diversion to other parts of Scotland. This diversion effect has both supply and demand side aspects, e.g.

- to what extent does an increase in visitor demand in one region increase prices in that region only, or do firms in that region hire labour and other resources from across Scotland, increasing prices at the national level;
- when prices rise in one region, are potential visitors likely to divert to other regions of Scotland or to be displaced entirely.

3.26 Additionality requires that tourists would not otherwise have visited the same destination in the absence of the attraction in question being available. For an individual attraction, this means that the spending of a visitor who would otherwise have visited a different attraction in the same destination would not be included in an economic impact assessment. For a group of attractions such as wildlife operators, or an encompassing activity such as wildlife tourism, it is
important to distinguish between visitors who would have visited another attraction within that group or activity and those who would have made a different type of trip to the same destination. While the former are not additional when assessing the economic impact of the attraction that they visited, they need to be counted as additional when assessing the whole activity.

3.27 When considering wildlife tourism, therefore, it is important to include as additional those visitors for whom wildlife is the attraction that has prompted their visit but who would otherwise have visited another wildlife attraction in the same locality. When considering the individual attraction that prompted their visit, these visitors would not be additional to the locality, as they would visit another wildlife attraction there, but for the industry as a whole they are additional.

3.28 The definition of the locality under consideration is an important aspect of additionality. When considering the impact of wildlife tourism in the whole of Scotland, it is important to discount visitors who would otherwise have visited somewhere else in Scotland (they are not additional), and of residents of Scotland who would otherwise spend their money on something else within Scotland. When considering a region within Scotland, these considerations need to be based on the region itself.
4 REVIEW OF LITERATURE

4.1 There have been a number of wildlife tourism-related studies undertaken over the last decade or so which need to be reviewed to help provide an evidence base for the current study, and also to help inform the development of a robust approach to meet the study objectives.

4.2 Recent growth in the range and volume of wildlife tourism activities worldwide (e.g. see Mintel 2008; UNEP 2006) has led to awareness of the impact that wildlife tourism activities have on local communities. In Scotland, this has led to a number of studies estimating the economic impact of wildlife tourism and similar activities.

4.3 There is no single definition of wildlife tourism that is used by all researchers. The broad term ‘wildlife tourism’ is used to describe an extensive range of different wildlife-based trips which can be segmented according to both the level of involvement inherent in the tourists’ motivations, the length of engagement and the type of flora and fauna. ‘Wildlife holidays’, however, are distinct from other nature-based holiday activities insofar as the main motivation to visit a destination is to see and gain an understanding of the local fauna and flora without harming the natural environment (Duffus and Dearden 1990).

4.4 Reynolds and Braithwaite (2001) show that wildlife tourism (or wildlife-based tourism, WBT, in their terminology) overlaps in sometimes complex ways with other forms of tourism. Rural tourism, nature-based tourism and ecotourism are all terms that overlap, or in the case of nature-based tourism, include, wildlife-based tourism.

4.5 Several studies have focussed on wildlife tourism in Scotland at a national level (A&M 2002a, 2002b; Rowan Tree Consulting 2008; The Tourism and Environment Forum 2006), providing estimates of the size of the sector in terms of supply and employment. However, there are differences in the types of tourism included in these studies compared with those included in the definition of wildlife tourism used for this research. Although A&M (2002) and Rowan Tree Consulting (2008) focus on sites and facilities offering wildlife viewing experiences, these sites are not necessarily limited to this and may also offer other forms of wildlife tourism (i.e. consumptive) and other types of nature-based tourism. This is more notable in the Tourism and the Environment Forum (2006) review, which extended to include both wildlife and nature tourism providers.

4.6 Other UK and Scottish national studies have been conducted but these have a much broader scope and only include wildlife tourism as an element (e.g. RPA & Cambridge Econometrics, 2008), which makes it difficult to separate out the impacts of wildlife tourism alone. In contrast, some studies have had a much narrower focus on a particular type of wildlife tourism, e.g. marine wildlife tourism (Masters et al 1998), whale-watching (Warburton, Parsons, Woods-Ballard, Hughes and Johnston 2001), however even here problems can emerge especially when supply-side surveys are conducted and sites or facilities are included which may also cater for other types of tourism. This highlights the complexity of researching the wildlife tourism sector due to the
many overlaps with other types of tourism, and this needs to be considered when selecting an approach to adopt.

4.7 In addition to types of tourism included, studies also differ by region covered. As well as UK and Scottish-wide studies, there have been several regional studies, although these are limited to the Highlands and Islands (George Street Research and Jones Economics 2003; Masters et al 2001) and West Scotland (Warburton et al, 2001). From reviewing published sources, there appears to be a lack of research into the impacts of wildlife tourism in other regions in Scotland.

4.8 While no studies have previously estimated the contribution of the wildlife tourism sector to the Scottish economy, or the impact of wildlife tourism in Scotland, one study has undertaken similar research for the Highlands and Islands (George Street Research and Jones Economics 2003). This found that trips where wildlife was an activity (not only where it was a primary purpose of visit) accounted for £155.5m in spending, of which £84.5m was judged to be additional spending because of wildlife tourism. This additional spending led to an estimate of employment generated of 2,276 full-time equivalent (FTE) jobs. Previously, another study (Masters et al 1998) had estimated that £44.8 million was spent by marine wildlife tourists alone in the Highlands and Islands region, supporting 2,771 FTE jobs. There is some overestimation inherent in this study, which (a) takes no account of additionality or displacement, and (b) adds downstream expenditure to direct expenditure and then applies employment multipliers (which include downstream employment) to the sum. Adjusting for these by excluding Masters et al’s downstream expenditure would give an employment multiplier of 2,084 FTE jobs. Taking George Street Research and Jones Economics’ ratio of additional to total expenditure would reduce this to 1,132 FTE jobs.

4.9 At the national level, one study exists (Rowan Tree Consulting 2008) that puts the revenue of businesses that are members of Wild Scotland at £9m, employing 496 FTE employees, but this both excludes wildlife businesses that are not members of that organisation and does not include spending outside the wildlife businesses.
5 ECONOMIC IMPACT ASSESSMENT

5.1 The economic impact assessment draws upon a variety of sources, including official published statistics and the results from the quantitative surveys described in Annex 1.

5.2 The assessment provides estimates of both the gross economic contribution and the net economic impact of wildlife tourism in Scotland. This includes provision of estimates in total as well as:
   • for terrestrial, coastal and marine based wildlife tourism;
   • by region.

5.3 This requires a number of steps to be completed:
1. estimation of overall wildlife tourism values, in terms of number of visitors and their expenditure;
   • estimation of the regional structure of these totals;
   • estimation of these totals for terrestrial, coastal and marine wildlife tourism;
   • estimation of the seasonal component of these wildlife tourism values;
2. calculation of how these value estimates translate into gross economic contribution of wildlife tourism to the economy of Scotland and to regional economies;
3. estimation of the net economic impact derived from wildlife tourism.

Measuring Tourism Demand for Wildlife

5.4 An important aspect of the definition of wildlife tourism is that the primary purpose of a trip must be to view, study or enjoy wildlife. The surveys used here directly ask respondents what their main reason for visiting is, with wildlife being one of seven options (as well as an additional option enabling respondents to write a reason). Because there is a close relationship between countryside and wildlife, respondents who also chose the option of visiting the countryside as their main reason were classified as wildlife tourists if they also answered a latter question indicating that one or more forms of wildlife were essential or very important for their trip.

5.5 Assessments of this nature often rely on a survey to provide an assessment of the percentage of tourists who fall into a certain category, such as wildlife tourists, with that percentage then being grossed up by using published official statistics on the number (and spending) of all tourists. In this regard, the UKTS data for 2008 is used to gross up domestic [overnight] tourism. For each purpose of visit (leisure, visiting friends and relatives, business and other), survey respondents are given a weight so that the weighted total of all respondents matches the numbers of trips by purpose of visit in the UKTS data for 2008. This is identical to calculating the proportion of tourists in each purpose of visit category who are wildlife tourists, and applying these percentages to the UKTS totals by purpose of visit.

5.6 Total numbers of leisure day visitors are however unknown, with the 2002-3 GB Leisure Day Visits Survey (GBLDVS) providing a dated, and unreliable,
estimate. A grossing up procedure based on estimates of the proportion of leisure day visitors motivated by wildlife cannot therefore be used.

5.7 The methodology used here aims to provide an unbiased estimate of the number of domestic tourists who are motivated primarily by wildlife through a postal survey of UK residents who have previously taken an overnight trip to Scotland. This gives, within the bounds of confidence intervals due to sample sizes, a reliable estimate of domestic wildlife tourism in terms of trips, nights and expenditure.

5.8 The assessment then takes results from a survey conducted at wildlife sites around Scotland to determine the ratio of wildlife day visitors to wildlife domestic tourists. This is used to calculate the number of wildlife day visitors and their expenditure. It is important to note that the exact same questions relating to wildlife as a motivation were asked in this survey as in the postal survey, so only those day visitors and domestic tourists who are classified as being primarily motivated by wildlife (through the above definition) are included in these calculations.

5.9 A similar assessment of the number of, and expenditure by, overseas wildlife tourists is made through reference to operators’ visitor numbers from overseas and domestic tourists.

**Market Size**

5.10 Calculations from the survey results at the national level are summarised in Table 1. Calculations are made for trips, nights and spend in the following steps:

1. The proportion of domestic tourists who are primarily motivated by wildlife is taken from the results from the postal survey. Wildlife tourists stay longer than average and spend more per night, resulting in higher proportions of spending and nights than trips being accounted for as primarily motivated by wildlife.

2. Statistics from UKTS for 2008 on domestic tourism to Scotland are used.

3. The values for trips, nights and spending by wildlife tourists are calculated by multiplying the results of step 1 by the results of step 2.

4. The ratio of wildlife day visitors to wildlife domestic tourists is taken from the onsite survey.

5. Values for wildlife day visitors’ trips and spending are calculated by multiplying the results of steps 3 and 4.

6. The ratio of overseas visits to domestic tourists is taken from the survey of operators. Here the results rely only on visitor numbers rather than visitors who are primarily motivated by wildlife.

7. An adjustment is made by halving the overseas to domestic tourist ratio to take account of the uncertainty, given that the overseas estimates are based on visitors rather than on those primarily motivated by wildlife, and that overseas visitors are less likely to be motivated in their trip by wildlife as their longer trip
distance and higher trip cost is more likely to give higher numbers of general trips and multi-purpose trips than for domestic tourists².

8. The values for overseas tourists are calculated by multiplying the results of steps 3 and 7.

Table 1: Market Size Calculations and Ratios

<table>
<thead>
<tr>
<th>Step</th>
<th>Trips</th>
<th>Nights</th>
<th>Spend</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5.20</td>
<td>6.30</td>
<td>7.4</td>
</tr>
<tr>
<td>2</td>
<td>12.15</td>
<td>44.19</td>
<td>2812.0</td>
</tr>
<tr>
<td>3</td>
<td>0.63</td>
<td>2.80</td>
<td>208.1</td>
</tr>
<tr>
<td>4</td>
<td>0.65</td>
<td>-</td>
<td>0.07</td>
</tr>
<tr>
<td>5</td>
<td>0.41</td>
<td>-</td>
<td>14.3</td>
</tr>
<tr>
<td>6</td>
<td>0.24</td>
<td>0.52</td>
<td>0.52</td>
</tr>
<tr>
<td>7</td>
<td>0.12</td>
<td>0.26</td>
<td>0.26</td>
</tr>
<tr>
<td>8</td>
<td>0.08</td>
<td>0.72</td>
<td>54.4</td>
</tr>
</tbody>
</table>

5.11 These calculations are shown in Table 1, with results summarised in Table 2. In total, these calculations show that 1.12 million wildlife trips are made each year, with wildlife tourists spending 3.5 million nights in Scotland and spending a total of £276 million.

Table 2: Summary of Results for Wildlife Tourism

<table>
<thead>
<tr>
<th></th>
<th>Trips (m)</th>
<th>Proportion of 2008 Totals (%)</th>
<th>Nights (m)</th>
<th>Proportion of 2008 Totals (%)</th>
<th>Spend (£m)</th>
<th>Proportion of 2008 Totals (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic tourists</td>
<td>0.63</td>
<td>5.2</td>
<td>2.8</td>
<td>6.3</td>
<td>208</td>
<td>7.4</td>
</tr>
<tr>
<td>Day visitors</td>
<td>0.41</td>
<td>*</td>
<td></td>
<td></td>
<td>14</td>
<td>*</td>
</tr>
<tr>
<td>Overseas tourists</td>
<td>0.08</td>
<td>3.1</td>
<td>0.72</td>
<td>3.7</td>
<td>54</td>
<td>4.4</td>
</tr>
<tr>
<td>Total</td>
<td>1.12</td>
<td>*</td>
<td>3.5</td>
<td>5.5</td>
<td>276</td>
<td>*</td>
</tr>
</tbody>
</table>

* Proportions of national totals cannot be calculated where day visitors are included because of the lack of up-to-date data on day visits.

5.12 Margins of error on these results are relatively small in absolute terms (Table 3) but significant in relative terms for overseas tourists in particular. The calculated value for total wildlife trips, for example, is 1.12 million with a margin of error of 0.29 million trips at the 95% confidence level. It is therefore 95% likely that the true number of wildlife trips is between 0.84 million and 1.41 million, given the definition of wildlife visitors used in this report.

5.13 Domestic tourists are the largest group of wildlife visitors according to the central estimates of trips, however the lower bound of the confidence interval for domestic tourism (0.54) is lower than the upper bound of the day visitor confidence interval (0.68), so the possibility that there are more wildlife day visitors than domestic tourists cannot be altogether ruled out. Similarly, the lower bound of the confidence interval for wildlife day visitor trips (0.14) is lower

² Note that there is no data to tell us how more or less motivated by wildlife overseas tourists are likely to be compared with domestic tourists, so this conservative estimate of this ratio is used.
than the upper bound of the confidence interval for overseas tourists, so the possibility that there are more overseas wildlife tourists than wildlife day visitors also cannot be ruled out.

5.14 The 95% confidence interval of 1.12 +/- 0.29 million trips is equal to an interval 25% either side of the central estimate (0.29 million is 25% of 1.12 million), so that where national level figures are given for wildlife tourism where confidence intervals cannot be calculated, it should be borne in mind that at the national level, there is a 25% margin of error on trips, and this gives a rough indication of the accuracy of other figures.

Table 3: Margins of Error for Wildlife Tourism Trips

<table>
<thead>
<tr>
<th></th>
<th>Trips (m)</th>
<th>Between (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic tourists</td>
<td>0.63 +/- 0.09</td>
<td>0.54 and 0.73</td>
</tr>
<tr>
<td>Day visitors</td>
<td>0.41 +/- 0.27*</td>
<td>0.14 and 0.68</td>
</tr>
<tr>
<td>Overseas tourists</td>
<td>0.08 +/- 0.08**</td>
<td>0 and 0.16</td>
</tr>
<tr>
<td>Total</td>
<td>1.12 +/- 0.29*</td>
<td>0.83 and 1.41</td>
</tr>
</tbody>
</table>

* All margins of error are for 95% confidence interval.

** As the overseas tourists figure does not rely on the same type of sampling as the other figures, a margin of error cannot be calculated for this result. To show how it might affect the margin of error for total wildlife trips, a wide margin of error is used.

5.15 When compared with national level statistics for 2008, wildlife tourism accounts for 5.2% of domestic tourist trips in Scotland, 6.3% of nights and 7.4% of spending (Table 2). It accounts for 3.1% of overseas trips, 3.7% of nights and 4.4% of spending.

5.16 When comparing types of wildlife visitor in terms of the countryside, marine or coastal wildlife that attracts visitors, it is important to take into consideration the wider margins of error that result from this being a sample of wildlife visitors, who only make up a small proportion of respondents to surveys. While, therefore, central estimates show that wildlife in the countryside is the primary purpose of visit for 48% of domestic tourists (Table 4), this is subject to a 95% confidence interval of +/- 25%. While marine tourism accounts for 17% of wildlife tourism trips, the 95% confidence interval is that this figure is between 0% and 36%. While countryside wildlife tourism does have more trips than marine wildlife tourism at a 95% level of confidence, it is not possible to say that coastal wildlife tourism has more trips than marine wildlife tourism (or less than countryside wildlife tourism) at this level of confidence.

Table 4: Margins of Error of the Proportions of Wildlife Domestic Tourist Trips Classified by Type of Wildlife

<table>
<thead>
<tr>
<th></th>
<th>Proportion of Wildlife Domestic Tourist Trips</th>
<th>Between</th>
</tr>
</thead>
<tbody>
<tr>
<td>Countryside</td>
<td>48% +/- 25%</td>
<td>23% and 73%</td>
</tr>
<tr>
<td>Marine</td>
<td>17% +/- 19%</td>
<td>0% and 36%</td>
</tr>
<tr>
<td>Coastal</td>
<td>35% +/- 24%</td>
<td>11% and 59%</td>
</tr>
</tbody>
</table>
5.17 Information on spending at wildlife attractions (entrance or trip fees and souvenir purchases, but not including food or any other purchases) shows that wildlife tourists spend 12% of their total trip expenditure at these attractions; day visitors spent 20% of their total trip expenditure there. Translated into the national level figures above, spending by wildlife visitors at wildlife attractions totals £34.4 million (Table 5). Calculating, given the relative numbers of wildlife and non-wildlife visitors at attractions (from the onsite survey conducted) and their relative spend per person on wildlife attractions compared to wildlife visitors, the spend by non-wildlife visitors at wildlife attractions totals £58.3 million. Totalling the spending by wildlife and non-wildlife visitors gives an estimate for the turnover of wildlife attractions of £92.7 million, of which £69.3 million (75%) is spent by domestic tourists. Noticeably, total spending by non-wildlife visitors (those whose main reason for making their trip is not to visit wildlife but who also visit a wildlife a site during their stay) makes up almost two thirds (63%) of total expenditure at wildlife attractions.

5.18 Including a share of daily spend on food and beverages (assuming that one third of all food and beverage purchases are made at a visitor site and further dividing this according to expenditure at wildlife sites relative to all sites) and a similar share of car parking expenditure would increase the total spend at wildlife attractions to £129.6 million.

<table>
<thead>
<tr>
<th></th>
<th>Domestic Tourists</th>
<th>Day visitors</th>
<th>Overseas Tourists</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spend on wildlife by wildlife visitors (£million)</td>
<td>25.0</td>
<td>2.9</td>
<td>6.5</td>
<td>34.4</td>
</tr>
<tr>
<td>Spend on wildlife by non-wildlife visitors (£million)</td>
<td>44.3</td>
<td>2.4</td>
<td>11.6</td>
<td>58.3</td>
</tr>
<tr>
<td>Total spend on wildlife (£million)</td>
<td>69.3</td>
<td>5.4</td>
<td>18.1</td>
<td>92.7</td>
</tr>
</tbody>
</table>

5.19 Defining wildlife tourists by primary purpose of visit is in practice far from simple. Respondents to surveys were asked to define themselves, first by purpose of visit (holiday, business, visiting friends or relatives, other) and then by main reason for visit, with wildlife being one of several possible options (city break, heritage, night life, cultural experiences, enjoy the countryside, see wildlife, go hunting shooting or fishing, just to relax, something else). Those respondents who chose ‘to see wildlife’ for this question were classified as being wildlife visitors.

5.20 There is, however, a great deal of overlap between motivations to enjoy the countryside and to view wildlife. While many visitors who go to see the countryside do so for other motivations entirely, many go for a mix of countryside and wildlife reasons, attach a high degree of value to viewing wildlife, would not make their visit without the possibility of seeing wildlife, and are in the overlap between wildlife and countryside motivations and could
rightfully be counted in either categories. A later question asked respondents for the importance that they attached to ten natural items, allowing them to grade them from ‘irrelevant’ to ‘essential’. These included five wildlife items (birds, flora, insects, marine mammals and other mammals) and five items reflecting the scenic attractions (the countryside, coast, mountains, lochs and the sea). Those respondents who had earlier chosen countryside as their main reason for visit were then classified as wildlife tourists if they chose either ‘essential’ or ‘very important’ to any of the five wildlife categories.

5.21 In order to compare against other studies or other definitions, the following data show how the definition of wildlife visitors would affect the number of visits made by domestic wildlife tourists (Table 6). While a definition that excludes the overlap between countryside and wildlife would lead to only 0.22 million trips, while classifying all those who rate wildlife as essential to their trip would lead to counting 0.92 million trips. In this study, the third definition in Table 5 is used, with wildlife tourists either directly defining themselves as such, or defining the main reason for their trip as the countryside but with wildlife being very important or essential.

<table>
<thead>
<tr>
<th>Definition</th>
<th>Number of Trips (million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only those choosing wildlife as the main reason for their visit</td>
<td>0.22</td>
</tr>
<tr>
<td>Those choosing wildlife as the main reason for their visit, plus those choosing countryside and also rating wildlife as ‘essential’</td>
<td>0.43</td>
</tr>
<tr>
<td>Those choosing wildlife as the main reason for their visit, plus those choosing countryside and also rating wildlife as ‘essential’ or ‘very important’</td>
<td>0.63</td>
</tr>
<tr>
<td>Those choosing wildlife as the main reason for their visit, plus those choosing countryside and also rating wildlife as ‘essential’, ‘very important’ or ‘important’</td>
<td>0.92</td>
</tr>
<tr>
<td>All those rating at least one wildlife item as ‘essential’ regardless of the main reason for their visit</td>
<td>0.85</td>
</tr>
</tbody>
</table>
The Wildlife Tourist Season

5.22 Clear perceptions of there being a wildlife tourist season have emerged from this research, with quantitative estimates of the percentage of domestic wildlife tourists visiting at different times of the year (Figure 2) showing when wildlife tourists do visit Scotland. There are clear peaks in May and June, together accounting for half of all wildlife tourism visits over the year.

5.23 Wildlife operators themselves see July and August as particular high season months (Figure 3), reinforcing views from operators in interviews that tourists who are not primarily motivated by wildlife make up a large proportion of their customers during these months that are the peak season for tourism in Scotland. The times that wildlife tourists visit the most are not necessarily the same (and these results demonstrate the differences) as the times when wildlife operators are busiest.

5.24 Perceptions of when wildlife enthusiasts visit, being a more strict term than wildlife tourists, and including only the more serious wildlife visitors, are spread more evenly throughout the period from April to October (Figure 4), although wildlife enthusiasts peak in May and June as do wildlife tourists.
Profile of Domestic Wildlife Tourists

5.25 Profiles were obtained of domestic wildlife tourists and wildlife day visitors through the survey instruments used in this analysis. Sample sizes are not sufficient to allow a meaningful presentation of results for overseas wildlife tourists, so the following figures relate only to domestic visitors.

5.26 From these results it is apparent that while wildlife visitors (overnight tourists and day visitors) are spread among all age groups, there is a peak in the 45-54 years category for overnight tourists, but that all older age groups from 45 years up are present in numbers for day visitors. The 16-24 and 25-34 years categories are only lightly represented in both types of wildlife visitor.

Figure 5: Age Profile of Domestic Wildlife Visitors (%)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Overnight Tourists</th>
<th>Day Visitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 -15 years</td>
<td>10.4</td>
<td>14.2</td>
</tr>
<tr>
<td>16 - 24 years</td>
<td>2.9</td>
<td>4.5</td>
</tr>
<tr>
<td>25 - 34 years</td>
<td>11.1</td>
<td>7.3</td>
</tr>
<tr>
<td>35 - 44 years</td>
<td>20.0</td>
<td>14.2</td>
</tr>
<tr>
<td>45 - 54 years</td>
<td>27.4</td>
<td>19.8</td>
</tr>
<tr>
<td>55 - 64 years</td>
<td>18.5</td>
<td>19.7</td>
</tr>
<tr>
<td>65+</td>
<td>9.7</td>
<td>17.1</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

5.27 Wildlife day visitors to Scotland tend to live in Scotland, with only 8.3% (Figure 6) resident in the North of England. Wildlife tourists are more widely spread throughout the UK, although almost one fifth of them resident in Scotland.

Figure 6: Place of Residence of Domestic Wildlife Visitors (%)

<table>
<thead>
<tr>
<th>Region</th>
<th>Overnight Tourists</th>
<th>Day Visitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scotland</td>
<td>54.9</td>
<td>91.7</td>
</tr>
<tr>
<td>North of England</td>
<td>16.6</td>
<td>8.3</td>
</tr>
<tr>
<td>London</td>
<td>3.2</td>
<td>0.0</td>
</tr>
<tr>
<td>Rest of the UK</td>
<td>25.3</td>
<td>0.0</td>
</tr>
</tbody>
</table>

5.28 Groups tend to be comprised of immediate family only, for both overnight and day trip wildlife visitors (Figure 7). Only around one in ten of overnight wildlife tourists and one in five wildlife day visitors travelled alone.

Figure 7: Group Composition of Domestic Wildlife Visitors (%)

<table>
<thead>
<tr>
<th>Group</th>
<th>Overnight Tourists</th>
<th>Day Visitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travelled alone</td>
<td>11.7</td>
<td>20.8</td>
</tr>
<tr>
<td>Immediate family</td>
<td>59.4</td>
<td>62.5</td>
</tr>
<tr>
<td>Friends</td>
<td>16.6</td>
<td>0.0</td>
</tr>
<tr>
<td>Family and friends</td>
<td>12.3</td>
<td>16.7</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
5.29 Wildlife tourists stay in a variety of accommodation types (Figure 8), with hotels, motels, guest houses and bed and breakfast accommodation making up over one third of all accommodation.

5.30 Wildlife operators view their market as being mainly general tourists who take an incidental visit to a wildlife site while on their trip. The general consensus from industry workshops was that approximately “70% are general tourists and 30% are just focused on the wildlife”. This categorisation relies on the operators’ own understanding of the difference between general and wildlife tourists, and different operators may have different understandings of this distinction, but it is nevertheless a good indication of the relative size of these two categories. Operators also recognise that there is a spectrum of visitors, ranging from some who are very serious and dedicated to viewing wildlife to others who have no interest in wildlife and visit a wildlife site for some other reason, with a range of strengths of motivations in between (Figure 9).

**Figure 9: The Spectrum of Visitors’ Dedication to Wildlife**
5.31 The importance of tourists with a casual or passing interest in wildlife should not be understated, as although these are excluded from the definition of wildlife tourists used in this report, they make up the majority, almost two-thirds, of spending at wildlife sites (see paragraph 5.17). Wildlife visitors are however more likely to make repeat visits to wildlife attractions in Scotland (Figure 10) and also have a higher pattern of spend per person per day (Figure 11).

5.32 One aspect of their wildlife activities that respondents to both surveys were asked is their behaviour towards wildlife at home. In both surveys, the majority of non-wildlife visitors (those whose primary motivation on the trip was not to view wildlife) did undertake some form of wildlife viewing while at home, such as taking occasional local walks to watch wildlife. Overall, though, the percentages of non-wildlife visitors who undertook such trips is lower than that for wildlife visitors – in the postal survey, for example, 57% of wildlife tourists reported either frequent local walks to watch wildlife or regular trips to local nature reserves against an average of 25% for all tourists (Figure 12).
5.33 Terrestrial wildlife tourism attracts 43% of wildlife visitors, with 41% of nights spent in Scotland by wildlife tourists being made by visitors who are primarily motivated by visiting terrestrial wildlife (Table 7). Marine wildlife accounts for 21% of trips and 23% of nights, while coastal wildlife accounts for 36% of trips and 36% of nights.

5.34 Spending by terrestrial wildlife tourists is £113 million, by marine wildlife tourists is £63 million, and by coastal wildlife tourists is £100 million.

### Table 7: Distribution of Wildlife Tourism by Type

<table>
<thead>
<tr>
<th>Type</th>
<th>Trips %</th>
<th>Nights %</th>
<th>Spend £ million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terrestrial</td>
<td>43</td>
<td>41</td>
<td>113</td>
</tr>
<tr>
<td>Marine</td>
<td>21</td>
<td>23</td>
<td>63</td>
</tr>
<tr>
<td>Coastal</td>
<td>36</td>
<td>36</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>277</td>
</tr>
</tbody>
</table>

5.35 Regionally, the largest area of Scotland in terms of wildlife tourism is clearly the Highlands and Islands. 50% of wildlife tourists visit this region at some point in their trip to or in Scotland (Table 8). This region attracts £124 million of wildlife tourism spending. The ‘West Coast & Islands, Loch Lomond & Trossachs’ in the central west of Scotland attracts 23% of visitors, spending £29 million. Some caution must be used when comparing these results, as sample sizes are lower for regional results than at the national level.

### Table 8: Regional Distribution of Wildlife Tourism

<table>
<thead>
<tr>
<th>Region</th>
<th>Trips %</th>
<th>Nights %</th>
<th>Spend (£m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highlands and Islands [1,2,8 on map]</td>
<td>50</td>
<td>45</td>
<td>124</td>
</tr>
<tr>
<td>West Coast &amp; Islands, Loch Lomond &amp; Trossachs [5]</td>
<td>23</td>
<td>23</td>
<td>65</td>
</tr>
<tr>
<td>Glasgow, Ayrshire, Arran, Dumfries &amp; Galloway [7]</td>
<td>27</td>
<td>12</td>
<td>34</td>
</tr>
<tr>
<td>Total</td>
<td>149</td>
<td>100</td>
<td>276</td>
</tr>
</tbody>
</table>

Note that visitors sum to greater than 100% as some overnight tourists go to more than one region during the course of their visit. Results for the Shetlands and Orkneys are aggregated with the Highlands and Islands due to small sample sizes for these islands.
Supply Considerations

5.36 The information on supply of wildlife tourism contained here is derived from an online survey of organisations interested in wildlife activities. This survey is from a self-selecting non-representative sample of 76 businesses and public sector organisations, who decided themselves to respond to calls for respondents.

Types of Wildlife Tourism Organisation

5.37 Over a third of respondents (36%) are accommodation providers; the remainder are almost all types of wildlife or countryside operator: boat operators make up 17% of the sample, tour providers/operators 13%, wildlife safari operators 11%, visitor centres 8%, nature reserves 8%, country park/forest/estate 1% and wildlife charity/trust 1% (Figure 13). The four respondents who did not classify themselves into these categories are a bird of prey/falconry training school, a Forestry Commission Wildlife Watch Centre, an outdoor activity centre and a pony trekking and trail riding holiday centre.

5.38 Of the tour providers/operators, 40% only offer full day tours, 30% offer only part day tours, and 30% offer both part and full day tours. Most of these operators offer different types of tours, or consider the same tour to fall into several different categories. 80% offer wildlife tours, while 70% offer nature tours, 40% offer ecotourism tours and 40% offer walking (in the countryside) tours (Figure 14).

5.39 36% of boat operators offer trips with accommodation included, which are equally split between accommodation on a boat and in self catering accommodation ashore. All offer marine trips, with 8% also offering
freshwater trips. All these operators indicated that they actively look for dolphins or porpoises, seals and seabirds when on trips (Figure 15). Other species searched for include whales (85%), otters (69%) and other birds (62%).

5.40 When asked what particular species they are focussed on (a question asked to all types of business), some of the respondents could clearly identify a focus while others were unable to identify specific species (e.g. comments identifying the species focus as “all Scottish birds, animals, plants and insects”, “all the birds, mammals, plants and insects of Scotland” and “too many to give all”. Others were very specific, identifying one or several bird species. Overall, the majority of businesses include seabirds, other birds, deer and plants as focusses (Figure 16).

Employment in Wildlife Tourism Organisations

5.41 Respondents to the survey are largely small enterprises with small numbers of employees, but of these employees, the majority of respondents rely on year-round staff, with a mixture of full time (FT) and part time (PT) employees (Figure 17) with additional seasonal staff. A minority of firms include volunteers, but larger organisations include large numbers of seasonal volunteers. 10% of the respondents use large numbers (more than 16) of seasonal volunteers, which because of the size of these few organisations and the large number of seasonal volunteers that they use, leads to a high reliance across all respondents on seasonal volunteers (Figure 18).
5.42 Weighting part time employees as half a full-time equivalent (FTE) and seasonal employees as half an FTE (so that part-time seasonal employees count as one quarter of an FTE), operators who responded to this survey have an average of 7.1 FTE employees.

5.43 In terms of the origin of employees prior to recruitment the majority of respondents indicated that all employees were sourced locally (52%), with 60% indicating that over 75% of employees were sourced locally (Figure 19). Meanwhile, 10% of respondents did not source any employees locally and for 12% of respondents, a majority of employees were living outside of Scotland before employment.

Figure 18: Overall Structure of Employment

Figure 19: Source of Employees (%)
The Economic Contribution of Wildlife Tourism to Scotland’s Economy

5.44 The economic contribution of wildlife tourism results from applying a set of multipliers to the expenditure results reported above. These multipliers result from updating the previous Scottish Tourism Multiplier Study (STMS) so that when those multipliers are applied to tourism spending on a product (for example, transport), the resulting economic contribution at the national level (for all tourism spending on accommodation in Scotland) equals that in the 2006 Supply and Use tables published by the Scottish Government. These economic contribution calculations rely on direct and indirect multipliers (‘type I’), rather than those including induced effects as well (‘type II’) that are used in impact analysis.

5.45 The method of updating multipliers takes the national level multipliers from STMS and compares them for each product with the relevant multiplier in 2006 from the 2006 Supply and Use Tables. A ratio is then derived for each product to update STMS multipliers to 2006. Updated multipliers are calculated for each region by applying this ratio to each product multiplier and weighting multipliers of each product by wildlife tourism spending by product. The linkages between tourism and spend, and between industries, in the STMS study are therefore also updated to reflect changes at the national level.

5.46 For example, multiplying (all, not just wildlife) domestic tourism spending on accommodation in each region by (‘type I’) accommodation multipliers from the STMS gives £55 million in generated income. Using the 2006 Supply and Use tables gives a figure of £75 million. A ratio of 1.39 (=75/55) is then applied to all regional income multipliers from the STMS to provide a set of updated multipliers for accommodation.

5.47 Two sets of ‘type I’ multipliers are available in the STMS and used here. One set gives income and employment generated locally (‘local’), the other includes income and employment generated elsewhere in Scotland (‘national’). When judging the economic contribution of wildlife tourism to the national economy, the sum of national level impacts are used; when judging the contribution of an individual region’s wildlife tourism sector to that region’s economy, the local level figures should be used.

5.48 Results from this analysis show that wildlife tourism contributes £156 million to the national economy, and employs 7,446 FTE employees. Wildlife tourism in the Highlands and Islands (including Shetland and Orkney) generates £63 million to the local economy and employs 2,694 FTE employees locally. It has an additional impact on the rest of Scotland, so that the national level contribution of Highlands and Islands’ wildlife tourism sector is £78 million and 3,509 FTE jobs. As with the estimates of expenditure in each region, some caution has to be used with the figures in Table 9 because of the relatively small sample sizes for results at the regional level.
Table 9: Economic Contribution of Wildlife Tourism

<table>
<thead>
<tr>
<th>Region</th>
<th>Income (Local) £million</th>
<th>Income (National) £million</th>
<th>Employment (Local) FTE employees</th>
<th>Employment (National) FTE employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highlands and Islands</td>
<td>63</td>
<td>78</td>
<td>2,694</td>
<td>3,509</td>
</tr>
<tr>
<td>Aberdeenshire, Moray &amp; Cairngorms National Park</td>
<td>15</td>
<td>18</td>
<td>631</td>
<td>822</td>
</tr>
<tr>
<td>Perthshire, Angus &amp; Fife</td>
<td>6</td>
<td>8</td>
<td>251</td>
<td>359</td>
</tr>
<tr>
<td>West Coast &amp; Islands, Loch Lomond &amp; Trossachs</td>
<td>24</td>
<td>32</td>
<td>1,049</td>
<td>1,527</td>
</tr>
<tr>
<td>Edinburgh, Lothians &amp; Scottish Borders</td>
<td>2</td>
<td>3</td>
<td>189</td>
<td>436</td>
</tr>
<tr>
<td>Glasgow, Ayrshire, Arran, Dumfries &amp; Galloway</td>
<td>13</td>
<td>16</td>
<td>545</td>
<td>793</td>
</tr>
<tr>
<td>Scotland Total</td>
<td>156</td>
<td>7,446</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5.49 This economic contribution is also calculated for different types of wildlife tourism (Table 10). The largest single contribution from type of wildlife tourism is from terrestrial wildlife tourism (generating £64 million of income for the Scottish economy and employing just over 3,000 FTE employees). While marine wildlife tourism generates around half the income (£36 million) and employment (1,705 FTE employees), the close links between coastal and marine wildlife tourism need to be taken into consideration. The coastal wildlife tourism sub-sector generates £56 million in income and 2,681 FTE employees, and is a mix of terrestrial and marine wildlife motives combined with genuine coastal species.

Table 10: Economic Contribution by Types of Wildlife Tourism

<table>
<thead>
<tr>
<th>Type</th>
<th>Expenditure £ million</th>
<th>Income £ million</th>
<th>Employment FTE Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terrestrial</td>
<td>114</td>
<td>64</td>
<td>3,061</td>
</tr>
<tr>
<td>Marine</td>
<td>63</td>
<td>36</td>
<td>1,705</td>
</tr>
<tr>
<td>Coastal</td>
<td>100</td>
<td>56</td>
<td>2,681</td>
</tr>
<tr>
<td>Total</td>
<td>156</td>
<td>7,446</td>
<td></td>
</tr>
</tbody>
</table>

Economic Impact

5.50 Gross economic impact is calculated (Table 11) to show the maximum economic impact that wildlife tourism might have in Scotland if (a) all induced effects of income spending are present, (b) there is no displacement, and (c) all wildlife tourists are additional to the Scottish economy. This shows that the gross economic impact of wildlife tourism is £182.8 million, with 7,714 FTE jobs created. The relevant multipliers, which are more useful for the analysis of the benefits of attracting additional tourists, are 1.3 (income) and 55.7 (employment), so that an additional £1 million of spending by wildlife tourists would lead to an increase in income of £1.3 million and of employment by 55.7 FTE jobs, if all that expenditure were additional and led to no displacement.
### Table 11: Gross Economic Impact in Each Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Income £ million</th>
<th>Employment FTE Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highlands and Islands</td>
<td>88.5</td>
<td>3,869</td>
</tr>
<tr>
<td>Aberdeenshire, Moray &amp; Cairngorms National Park</td>
<td>20.7</td>
<td>906</td>
</tr>
<tr>
<td>Perthshire, Angus &amp; Fife</td>
<td>9.5</td>
<td>364</td>
</tr>
<tr>
<td>West Coast &amp; Islands, Loch Lomond &amp; Trossachs</td>
<td>35.9</td>
<td>1,534</td>
</tr>
<tr>
<td>Edinburgh, Lothians &amp; Scottish Borders</td>
<td>9.5</td>
<td>244</td>
</tr>
<tr>
<td>Glasgow, Ayrshire, Arran, Dumfries &amp; Galloway</td>
<td>18.7</td>
<td>797</td>
</tr>
<tr>
<td><strong>Scotland Total</strong></td>
<td><strong>182.8</strong></td>
<td><strong>7,714</strong></td>
</tr>
</tbody>
</table>

5.51 Additionality is measured by a question for visitors to wildlife sites asking what they would have done if they had not made the trip to that wildlife site. The 20% of respondents who answered “don’t know” are excluded for the purposes of calculating additionality. The remaining responses are used to calculate how much of the spending that occurred because wildlife visitors made a trip would otherwise have been spent on something outside of Scotland (so is therefore additional). The answers to this question ("if you had not taken this trip, would you have made another trip instead") are treated as follows:

- If they answered “yes, to a similar type of location in Scotland”, this is taken to mean to a wildlife site, and such respondents are treated as being additional for the wildlife tourism industry.
- If they answered “yes, but to a different kind of location in Scotland”, this is taken to mean a visitor site not related to wildlife. These respondents are not counted as being additional.
- If they answered “yes, but to a location outside of Scotland" respondents are counted as being additional.
- If they answered “no, I would have spent the time and money doing something entirely different”, spending by those visitors who are resident outside of Scotland is counted as additional.
  - for visitors resident within Scotland, only the proportion that would likely have been spent on goods imported into Scotland is counted as additional.

5.52 These calculations result in 51% of wildlife domestic tourism being additional, and 58% of wildlife day visitors being additional. When these shares are applied to spending patterns, the economic impact of wildlife tourism reduces, to £94 million in income and 3,947 FTE jobs (Table 12).

5.53 The level of displacement is difficult to be certain of, for it depends on the context under which economic impact is being considered. During a recession displacement may be minimal, for example. One key aspect of displacement is the relation of wildlife tourism to the peak months of July and August, when in normal circumstances any additional tourism is likely to be fully displaced. As 30% of wildlife tourists visit in these months, a level of 30% displacement is
used, with results showing a net economic impact of £65 million, and with 2,763 FTE jobs resulting from wildlife tourists’ spending (Table 12).

5.54 Net economic impact calculations by type of visitor (Table 13) show that, with displacement, the net economic impact in terms of income of terrestrial, marine and coastal tourism is £27 million, £15 million and £24 million, with an impact on employment of 1,136 (terrestrial), 633 (marine) and 995 (coastal).

5.55 Domestic tourists clearly account for the largest part of the economic impact (£49 million, 2,082 jobs) as they account for the majority of wildlife visitor spending (Table 14).

**Table 12: Net Economic Impact (with Additionality Taken into Consideration)**

<table>
<thead>
<tr>
<th>Area</th>
<th>With No Displacement</th>
<th>With 30% Displacement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Income £ million</td>
<td>Employment FTE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Employees</td>
</tr>
<tr>
<td>Highlands and Islands</td>
<td>45</td>
<td>1,980</td>
</tr>
<tr>
<td>Aberdeenshire, Moray &amp; Cairngorms National Park</td>
<td>11</td>
<td>464</td>
</tr>
<tr>
<td>Perthshire, Angus &amp; Fife</td>
<td>5</td>
<td>186</td>
</tr>
<tr>
<td>West Coast &amp; Islands, Loch Lomond &amp; Trossachs</td>
<td>18</td>
<td>785</td>
</tr>
<tr>
<td>Edinburgh, Lothians &amp; Scottish Borders</td>
<td>5</td>
<td>125</td>
</tr>
<tr>
<td>Glasgow, Ayrshire, Arran, Dumfries &amp; Galloway</td>
<td>10</td>
<td>408</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>94</td>
<td>3,947</td>
</tr>
</tbody>
</table>

**Table 13: Net Economic Impact by Type of Wildlife Visitor**

<table>
<thead>
<tr>
<th>Type</th>
<th>With No Displacement</th>
<th>With 30% Displacement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure £ million</td>
<td>Income £ million</td>
<td>Employment FTE</td>
</tr>
<tr>
<td>Terrestrial</td>
<td>114</td>
<td>38</td>
</tr>
<tr>
<td>Marine</td>
<td>63</td>
<td>21</td>
</tr>
<tr>
<td>Coastal</td>
<td>100</td>
<td>34</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>276</td>
<td>94</td>
</tr>
</tbody>
</table>

**Table 14: Net Economic Impact by Type of Visit**

<table>
<thead>
<tr>
<th>Type</th>
<th>With No Displacement</th>
<th>With 30% Displacement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure £ million</td>
<td>Income £ million</td>
<td>Employment FTE</td>
</tr>
<tr>
<td>Day visitors</td>
<td>14</td>
<td>5</td>
</tr>
<tr>
<td>Tourists</td>
<td>262</td>
<td>89</td>
</tr>
<tr>
<td>Of which...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic tourists</td>
<td>208</td>
<td>70</td>
</tr>
<tr>
<td>Overseas tourists</td>
<td>54</td>
<td>18</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>276</td>
<td>94</td>
</tr>
</tbody>
</table>
6 MARKET TRENDS

6.1 This research shows that wildlife tourism has been growing even in a period of recession in the UK economy. The postal survey shows that, as a greater proportion of wildlife tourists had visited Scotland in more recent years than had non-wildlife tourists, that wildlife tourism’s share of total tourism in Scotland appears to be growing.

6.2 Of those wildlife tourism businesses who responded to the operator survey, the majority reported that turnover and visitor numbers had increased in the recent past. 52% reported higher turnover in the last financial year for which they had data compared to the previous year, and 57% reported higher visitor numbers this year (2009) compared with the previous year. Relatively few reported lower figures, 15% for turnover and 14% for visitor numbers (Figure 20).

6.3 Meanwhile, 88% of businesses expect that, in real terms, wildlife tourism in Scotland will either increase or increase significantly in the future (Figure 21). The majority also expect increases in their own wildlife tourism turnover and profit, but respondents were less positive about their expectations of the number of staff that they will employ for wildlife tourism activities, and of the number of wildlife tourism products that they will offer in the future, although the answers to these questions did not include any expectations of reductions in staff numbers or products.

6.4 The reasons for industry optimism were further explored in other aspects of research. In the industry workshop there was almost unanimous agreement that the demand for wildlife tourism experience is increasing and that this is coupled with more operators offering wildlife tourism experiences and more events being held by NGOs. In terms of market segments, experienced wildlife enthusiasts are increasing alongside the casual and general interest wildlife watchers. Some specialist operators, however, have noticed a definite shift from specialist wildlife viewing to a more general interest and had altered their product portfolio accordingly; although the location of businesses makes a difference: “businesses that are not on the generic nature trail will often only attract people with a keen interest in wildlife”.

6.5 There was also evidence of an ‘activity plus wildlife’ market, i.e. “mountain bikers who stop to look at wildlife”, “events that bring visitors” and “dedicated photographers are a growing market who used to be only affluent middle-aged males but now include one and all who come on photographic tours”.

Figure 20: Trends in Turnover and Visitor Numbers
6.6 The ‘Springwatch factor’ was frequently mentioned by wildlife tourists and operators alike. This refers to the influence of wildlife television programmes such as Springwatch, and is a relatively recent phenomenon. In the on-site survey, 32% of all visitors claimed that a television or radio programme prompted them to take their trip to a wildlife site, with Springwatch and Autumnwatch being programmes that prompted visits by 15% of visitors, and Coast prompting 14% of visits. Wildlife visitors were no more likely than others to have visited because of a programme, possibly because their motivation for making their visit was stronger and formed earlier, and because the Springwatch factor is just as likely to prompt a tourist to make an incidental trip to a wildlife site while on a longer trip as it is to prompt a wildlife tourist to take a whole trip for the primary purpose of seeing wildlife. ‘Post-Springwatchers’ are identified by many operators as individuals whose interest in wildlife has been kindled, or re-kindled, by the media, and in particular popular television wildlife programmes.

6.7 A further trend has also seen a move towards the popular and iconic species, as both overseas visitors and general visitors with a casual or passing interest in wildlife identify these species but not less well known ones.

6.8 Finally there is a definite trend towards more online bookings which underlines the importance of a good website. Last minutes bookings are also increasingly prevalent but these are problematic as visitors often expect a discount with late bookings, making both financial management and trip planning difficult.
7 SWOT ANALYSIS – BUSINESS AND VISITOR PERCEPTIONS

7.1 This section focuses on the perceptions and attitudes of two sets of stakeholders in wildlife tourism in Scotland: the business people for whom wildlife tourism is the raison d’être of their business and wildlife tourists in Scotland. The results are largely based on the qualitative research conducted for this study of wildlife tourism in Scotland. There is no attempt to quantify the frequency of the responses within these qualitative surveys. The focus is simply on the perceptions and attitudes.

7.2 The results are presented in a SWOT analysis, outlining the strengths, weaknesses, opportunities and threats of and to the wildlife industry in Scotland. This simple framework sets a basis for categorisation that can provide useful insights into the current state of the industry now and in the future.

7.3 There is a spectrum of possible visitor markets from committed wildlife watchers who spend the vast majority of their leisure time pursuing new wildlife opportunities to general interest wildlife watchers and casual visitors. These different types will have different motivations to visit Scotland and or areas within Scotland. For the committed wildlife watchers, the wildlife is the specific attraction or reason to visit. However, for the general interest wildlife watcher and for casual visitors this may not be the case as wildlife watching is combined with other holiday activities. For these latter two types of visitor the natural environment, historic or urban attractions may very well be as significant an attractor (motivation to visit) as the wildlife; however the opportunity to watch wildlife is still considered an important factor in their decision to visit.

7.4 The SWOT table (Figure 22) shows a range of factors in each category, which are in turn described below.

Strengths of the Wildlife Tourism Sector in Scotland

7.5 Scotland is an attractive destination for many visitors, and has a range of unique and diverse attractions. While the comments here are concentrated on the wildlife sector, it should always be remembered that wildlife tourism sits in the wider context of tourism and leisure activities and the intangible, emotional attributes of Scotland such as the unique combination of atmosphere, culture and “quintessential Scotland” and the fact that visitors who are used to urban centres can experience a complete change and immersion into cultural landscapes where they can totally switch off.

7.6 Wildlife resources were seen by many operators and wildlife tourists as being the single most important strength. The diversity and quantity of species, as well as their proximity to each other is clearly the main reason why wildlife tourists visit Scotland. There was also an acknowledgment among current wildlife tourists of the investment put into developing wildlife sites through visitor centres, hides and trails with recognition that these could be improved further, particularly from wildlife enthusiasts who had visited other countries in Europe.
### Figure 22: SWOT Analysis of Tourism’s Wildlife Tourism Product

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wildlife resources</td>
<td>Staffing problems</td>
</tr>
<tr>
<td>Visitor experience</td>
<td>Accessibility to the wildlife</td>
</tr>
<tr>
<td>Diversity of customers</td>
<td>Infrastructure</td>
</tr>
<tr>
<td>Authenticity</td>
<td>Seasonality</td>
</tr>
<tr>
<td>Government agency attitudes</td>
<td>Poor value for money</td>
</tr>
<tr>
<td>Information provision</td>
<td>Perceptions of poor service</td>
</tr>
<tr>
<td>Profile raising by Wild Scotland</td>
<td>Lack of clear strategic leadership</td>
</tr>
<tr>
<td>Natural environment</td>
<td>National level marketing</td>
</tr>
<tr>
<td>Uniqueness</td>
<td>Funding and support</td>
</tr>
<tr>
<td>Location</td>
<td>Weather</td>
</tr>
<tr>
<td></td>
<td>Midges</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Opportunities</td>
<td>Threats</td>
</tr>
<tr>
<td>-wide range of iconic species</td>
<td>Meeting visitor expectations</td>
</tr>
<tr>
<td>Product development</td>
<td>Built developments</td>
</tr>
<tr>
<td>Domestic Scottish potential.</td>
<td>Business complacency</td>
</tr>
<tr>
<td>Media coverage of wildlife.</td>
<td>Financial insecurity of businesses</td>
</tr>
<tr>
<td>Environmental awareness</td>
<td>Product deterioration</td>
</tr>
<tr>
<td>Attitude change</td>
<td>Foreign competition</td>
</tr>
<tr>
<td>‘Staycationing’</td>
<td>DIY wildlife tourism</td>
</tr>
<tr>
<td>Increasing political will</td>
<td>Lack of coherent strategy</td>
</tr>
<tr>
<td>Increasing co-operation</td>
<td>Government interest may be short-lived</td>
</tr>
<tr>
<td>Economic opportunities</td>
<td></td>
</tr>
</tbody>
</table>

7.7 **Visitor experience** is a key element of any tourism industry, for it is not a single product offered by an individual firm, but an amalgamation of products and environmental factors that form the overall experience. Focus group participants were in general agreement that Scotland is increasingly being recognised as a place that offers memorable wildlife experiences. In addition, it is seen as a place that offers additional visitor experiences (unique landscape, history, culture) that augment the wildlife product within an environment that is safe and friendly.

7.8 The **diversity of customers** gives the sector resilience as well as different growth opportunities and sustainability. According to operators in interviews and workshops, there is no reliance on a limited number of types of visitor and each type offered a counterbalance to any negative change in another type. Thus there was variation identified in terms of the origin (Scotland, UK, overseas) of the visitors and the age of the visitors. As importantly the level of focus of the visitor on the wildlife element of their visit varies. The visitors can be divided between committed (serious) wildlife watchers, general interest wildlife visitors and casual visitors. This in turn has lead to a diverse supply of wildlife experiences. Operators have been quick to embrace new market trends
and have been opportunistic with regards to product diversification to cater for the increased tourism demand to a) have “wilderness experiences” and b) to see charismatic and flagship species. Operators also concentrate their efforts on providing a good, all-round holiday experience to cater for the general tourist with a casual interest in wildlife watching.

7.9 **Authenticity** is seen as a strength by wildlife tourists, in that Scotland offers unspoiled, uncommercialised opportunities to view wildlife. Wildlife tourists are seeking authentic experiences but for many of these visitors they are seeking more than just a wildlife experience. As a result they have varied but overlapping demands. This is allied to experience, awareness and high levels of satisfaction of those who have visited Scotland. This is however mirrored in one of the threats discussed below, product deterioration, as the more serious wildlife enthusiasts worry that the authentic nature of these experiences may be spoilt by large numbers of general tourists.

7.10 **Government agency attitudes** were seen as a strength by wildlife organisations, in that they perceive that the Scottish Government is taking wildlife and its potential seriously, and that these attitudes are strengthening. This is countered, however, by several of the weaknesses identified later (lack of clear strategic leader, national level marketing of wildlife tourism, funding and support).

7.11 Visitors saw the **information provision** as being good, largely through the efforts of individual businesses that through websites in particular tend to offer good levels of information not only about their own services but in many cases about wildlife opportunities in the locality. Operators flagged information provision up as a weakness, however, but this seems to be more about national level marketing (identified in the weaknesses section) than about local level information.

7.12 Operators at the workshops as well as those interviewed were in general agreement that the **profile raising by Wild Scotland** was a tremendous benefit to the wildlife sector, bringing a much higher profile to wildlife tourism in Scotland than it used to have because “associations such as Wild Scotland have really brought wildlife tourism to the fore to turn Scotland into the number one wildlife watching destination in Europe”. While enthusiasm for Wild Scotland may be expected in the workshop as it was conducted at a Wild Scotland event, and hence was with operators who see enough benefits from Wild Scotland to attend their annual conference, this theme also emerged through (confidential) interviews with operators and the (anonymous) business survey. Membership of Wild Scotland was also discussed in terms of the business setting, through encouraging partnership and collaboration and the facilitation of good training programmes with regards to responsible wildlife watching and customer care. Here it was noted that “Wild Scotland had been hugely important” and that “the overall quality of the wildlife tourist experience has improved and grown”.

7.13 Three further strengths that have been identified are natural factors that while cannot be changed can be built upon through strategic planning and marketing to improve the Scottish wildlife tourism sector. The **natural environment** in terms of the variety and scale of Scottish landscapes and scenery is clearly seen as a great strength. The fact that this combines a wilderness feel with the
wildlife watching experience is clearly seen as a positive for many visitors, as is its **uniqueness** in terms both of iconic species of wildlife and distinctiveness of Scotland’s places, people and heritage. **Location** is also seen as an advantage in the UK market, where many respondents in qualitative surveys have said that there is simply no point in going further abroad when Scotland has so much to offer.

**Weaknesses of the Wildlife Tourism Sector in Scotland**

7.14 When asked what the barriers to the development of their business are, over one third of respondents to the business survey (36%) answered that there were no barriers. The barriers that were cited by the others were many and varied, with 9% citing lack of financial support, 8% indicating conflicts with other land users (e.g. local residents using land for other purposes and disturbing wildlife, developers), 6% difficulty in recruiting trained staff, 6% the current economic downturn and 5% competition from other providers. No individual weakness appears to exist that dominates all others, although two in particular – the lack of clear leadership and national level marketing, have received more attention from operators than others during interviews and workshops with operators. Individual businesses and visitors have identified certain weaknesses, with some respondents clearly strongly identifying a certain weakness that affects them.

7.15 **Staffing problems** are clearly a problem to a small number of operators in terms of difficulties in recruiting trained staff. Wider problems are that the quality of guides and interpreters, while good in many cases, is patchy across the whole of the industry. Visitors have no guarantee that their guides will be well trained, which may deter some from visiting. This weakness could be addressed by an industry-wide scheme of guide accreditation, either through a public sector quality scheme or voluntary private sector co-operation.

7.16 **Accessibility to the wildlife** (related to the next point, infrastructure) relates to the lack of accessibility to wildlife areas, which may be because of land ownership issues as well as remoteness and the difficulty in finding adequate places from which to view some species. Focus groups with lapsed and non-visitors (to Scotland) particularly pointed to accessibility issues related to focal points, signposting and transport infrastructure in remote areas and islands.

7.17 Public transport **infrastructure** is often seen as a weakness both by operators and visitors. While a number of private businesses have provided high quality facilities themselves, the picture across Scotland is patchy. Poor public transport infrastructure was noted by nearly all of the operators who felt that more attention should be paid to sustainable transport policies given the current debate on climate change. The lapsed and non-visitors also felt that Scotland would be very difficult to see using public transport and that there was a lack of innovative, integrated public transport infrastructure which met consumers’ needs such as combined train and ferry tickets or multiple island ferry deals.

7.18 Variable quality of business facilities inhibits visitors who do not want the risk that they may encounter one of the poorer businesses in the sector, adversely affecting all businesses. Operators expressed a concern regarding the welcome that visitors receive. Therefore the subject of quality, service and
customer care was seen as a crucial focus by all the operators in this study: “the biggest thing that people expect is that they are going to be looked after and cared for”. Unfortunately operators had grave doubts as to whether tourists actually experience the quality they are now expecting: “The level of service isn’t that great for tourists. Food and accommodation isn’t fantastic in a lot of parts of Scotland. At the moment there’s the top end that is done very beautifully and very well but the bottom end is done very badly”. The perception of operators is that some businesses deliver a very shabby product. They see that there is a profit to be made but do not go about their business in a professional manner. One operator directed her clients towards a boat trip. On their return she discovered that there had been “no, or limited, commentary and interpretation and no activity sheets for the young children to complete – so who is going to book that boat trip again?”

7.19 A lack, or at least a perceived lack, of self-catering accommodation deters visitors who would want this form of accommodation in rural settings near to wildlife sites: According to lapsed wildlife tourists at the Bird Fair, Scotland “lacks enough reasonably priced self-catering cottages or crofts”. Indeed the tourists who had experienced wildlife watching holidays overseas voiced the need for Scotland to develop more “wildlife interpretation centres which offer accommodation”, “improved youth hostels” (“youth hostels have moved on a lot but not in Scotland!”) and even “organised camping tours” whereby operators provide the transportation.

7.20 Seasonality of demand was identified as a weakness by operators in interviews, workshops and the operator survey. While the structure of seasonality peaks in May and September for wildlife tourism, wildlife operators are often busiest in July and August serving general visitors who make an incidental wildlife trip and expect to see wildlife at a time of year when it isn’t active. While wildlife tourism has the potential to attract more visitors outside of the main summer months, in the ‘shoulder’ months either side of the peak season, very few wildlife visitors make their trips from November to March, when almost a third of wildlife businesses close for the winter. Clearly, for businesses this is a problem, and is a potential barrier to investment, as it restricts the return on such investment. This is partly driven by the fact that other tourist infrastructure closes in the winter, for example restaurants and accommodation providers.

7.21 Wildlife tourism in Scotland is seen as being poor value for money by visitors overall, being a significant source of discouragement both from current and potential visitors. Worryingly, while not a consensus, some operators considered wildlife tourism in Scotland to be good value for money, indicating that either they do not realise that the sector is expensive compared to other destinations and activities, or perhaps more likely, that some businesses are offering good value for money but are being let down by other businesses being expensive. Although not explored in detail as part of this research, value for money perceptions by visitors are based on the whole cost of a trip, so it may be that travel to and accommodation in Scotland is seen as being expensive but that the wildlife sector itself could still be inexpensive and good value. While further research would be needed on this, including international comparisons, it may be that the wildlife tourism sector is being made
uncompetitive by other elements of the tourism industry, or that it is indeed giving poor value for money.

7.22 **Perceptions of poor service** exist at varying levels. These perceptions are particularly strong with lapsed visitors – those who had made trips to Scotland in the past, but not recently, and for these individuals may be more informed by past experiences with the tourism sector in Scotland rather than specifically wildlife sites. There were however some operators who cited poor service in other businesses, and it is clear that among wildlife operators and particularly accommodation providers, the level of service varies considerably from the very good to the very poor. In terms of accommodation providers, this is an issue that needs to be addressed in the context of the whole tourism industry.

7.23 A fairly strong consensus exists among operators that there is a **lack of clear strategic leadership** in the sector. This and the problems with national level marketing were consistently the most significant weaknesses as seen by operators. They thought that there was no clear strategic vision for wildlife tourism, that the marketing activities had the wrong emphasis, and there was little joined up marketing. Wild Scotland’s activities, while viewed as being good, were not co-ordinated with what activity was going on elsewhere, such as VisitScotland, which the operators did not see as representing wildlife tourism very well. In many cases operators were of the opinion that Wild Scotland operates in a public leadership vacuum, with little or no strategy for the sector as a whole. Strategic leadership could, for example, be addressed through a Scottish Government initiative to undertake a stock take of public sector and collaborative private sector activities in wildlife tourism, followed by a strategic plan, with other marketing, funding and support determined by the requirements of that plan.

7.24 **National level marketing** has been continually mentioned by operators as a weakness, in interviews and workshops. They perceive that marketing is going to be down to them and that in order to compete and be successful they will need to draw upon their own business acumen and resources. Whilst there is considerable support for Wild Scotland, VisitScotland is criticised for “not knowing about wildlife tourism” as “Scotland is not currently branded as a wildlife destination”. Businesses, in particular, believe that VisitScotland is not marketing wildlife tourism enough and that there are not strong enough web links between VisitScotland and Wild Scotland. Moreover, they see several latent overseas marketing opportunities as “Scotland is beginning to be seen as a wildlife watching destination by Europeans”, and potential overseas markets from the US where “unfortunately golf is still the number one marketing strand”. There was a general consensus in industry workshops that operators are moving away from membership of VisitScotland towards a greater relationship with Wild Scotland and spending money instead on developing their own internet sites. The largest annual trade fair for the wildlife industry is the British Birdwatching Fair, where virtually every country in wildlife tourism funds a stand. Scotland has been represented only by Wild Scotland, funded by the industry and volunteers. Several participants in the focus groups wondered why there were no Scottish public sector marketing bodies (tourist boards and national park authorities) at the fair as there were many such bodies from elsewhere in the UK.
7.25 In terms of funding and support, operators do not only consider marketing activities as a weakness but also the lack of funding to assist businesses. When it comes to development, funding is seen as a critical issue due to different funding grants in different areas. Operators see that funding has “dried up” in schemes that they can apply to, although the scope of this research has not included identifying where this has happened and determining the reason for any such cases. There was also some support for a marine national park and more National Parks in general. From operator workshops, it was argued that wildlife tourism needs to fit into the current landscape management policy with the recognition that wildlife tourism can play a part in allowing the land to reap more economic benefits. There has been no suggestion from operators in any of the research conducted with them that they should be singled out as a special case for support, but rather that they should have a level playing field and that they should fit into the wider landscape management appropriately, with for example, access to subsidies based upon land use for conservation that forestry activities can receive also being made available to wildlife operators who conserve forestry in the same way. It should be noted, however, that industry perceptions of a lack of funding does not necessarily mean that funding opportunities do not exist. Problems may be present in the communication of these funding opportunities or in the time that businesses may to devote to searching for funding.

7.26 Two further weaknesses are self-evident and repeated throughout the research: the weather and the presence of midges. These are natural factors that cannot be changed, but there are opportunities to mitigate them, for example by providing warm and dry wildlife centres and hides and by ensuring that there is a range of other things for wildlife tourists to do on wet days.

Opportunities of the Wildlife Tourism Sector in Scotland

7.27 The wide range of iconic species was often mentioned by both visitors and operators in terms of the potential to market them. Not only are such iconic species present in Scotland, but they are often more readily viewed than elsewhere, and in some cases are unique to Scotland. Marketing is essential to take advantage of this, but such a marketing role should also include on the ground planning of routes, infrastructure and product development.

7.28 Product development is a clear opportunity, as wildlife operators already have the tools and experience, partly because of a lack of national level strategy and marketing, to develop new products. They (or at least some of them) have clearly taken on the needs of flexible product development and dynamic packaging to match the requirements of post-Springwatch tourists, and indeed over a longer period have been very entrepreneurial in setting up businesses to serve markets that did not exist twenty or thirty years ago. While individual businesses (or again, some of them) clearly see the need for further product development, being flexible and responding to market needs, there is also a need at the destination level for co-ordination of and government support for new products, new types of experiences, with the dynamic management that such innovation entails.
7.29 The *domestic Scottish potential* is seen by many operators as a way of supporting the business by developing marketing towards Scottish residents. Making Scottish residents more aware of the wildlife possibilities available close to home also brings economic and social benefits to them that are not captured in economic impact studies. Developing this potential should be brought in to a wider strategic plan for the wildlife tourism industry, but at the very least those responsible for national level marketing need to consider marketing within Scotland as well as outside.

7.30 *Media coverage of wildlife* has been one of the key drivers of market changes over recent years, and the opportunity to take advantage of the growth in popularity of nature programmes was identified in relation to post-Springwatchers. While further opportunities exist in relation to current programming – for example, through national level bodies co-ordinating appearances on such programmes and co-ordinating with wildlife and accommodation providers at particular sites featured, the greater opportunity exists through even greater media coverage, through other channels and media. It is clear from this research that television programmes, typically Springwatch, have captured tourists’ imagination with regards to Britain’s endemic species. Indeed, Springwatch was repeatedly mentioned in all elements of this research as having instigated, supported or reinstated, an inherent love of nature, which has led in turn to increased numbers of wildlife visitors.

7.31 *Environmental awareness* is a key early-stage driver of interest in nature and wildlife. In-depth interviews with operators reveal growing perceptions that tourists have a much greater awareness. These attitudinal changes over recent years in the general environment in which wildlife tourism takes place has increased participation in outdoor pursuits and in general interest in nature, along with demand for wildlife viewing opportunities. According to a reserve manager: “there’s a sea change in a lot of people’s attitude towards wildlife and towards their own health. They want to get out there and enjoy it, they want to cycle they want to get fit and all the rest of it. I can only see wildlife tourism growing and getting better and better”. “People want this wildlife element now”.

7.32 Increased environmental education in schools, activity by environmental pressure groups, political and media exposure to environmental issues, all contribute to greater knowledge of and interest in nature, particularly in urbanised populations. These changes are perhaps influential in the changes in wildlife visitor numbers and types which are expected to offer continued opportunities in the future. Product development and marketing that takes place in the context of the environment, rather than just wildlife, can take advantage of this awareness and interest.

7.33 *Attitude change* amongst landowners can bring about improving access to wildlife. There is a general perception repeated several times in research with operators that landowners who previously opposed tourism development are gradually being persuaded of the economic benefits to them that wildlife tourism brings. This might be considered to present a permissive opportunity, in that it opens up more possibilities for development, rather than decisive opportunities, those that govern the choice of wildlife tourism destinations. This
attitude change can be reinforced by government action, and can be taken advantage of by taking account of it in strategic planning.

7.34 The recent trend towards ‘Staycationing’, broadly defined as holidaying domestically rather than overseas, although more specifically meaning undertaking holiday-like activities from home rather than taking a tourism trip, presents opportunities to the Scottish market, as well as challenges in preventing overseas and more distant domestic (UK) visitors from switching to such behaviour. The economic crisis and the threats of climate change inducing people away from long-haul travel are key drivers of staycationing. Given the links between increased environmental awareness and climate change, this presents an opportunity for nature-based tourism of all kinds to capture the attention of a new market: Indeed, the industry workshops and in-depth interviews with operators noted an “increased demand for accommodation due to the ‘staycation’ effect of the recession” and more domestic visitors from within Scotland. Moreover some operators have noticed “a change in attitude and a change in people’s perception as to what we’re doing to the planet. This is coupled with an awareness about the impacts of flying. However, Scotland offers a solution. You can come here and you don’t have to fly miles to see some fantastic wildlife”. It should be noted, though, that the recession and weakness of the pound have created much of the staycation effect, and that while climate change may have a much longer effects, any staycationing effect on tourism may have slow and gradual growth.

7.35 Increasing political will was seen as an opportunity by many operators, as the public sector bodies continue to recognise the worth of wildlife tourism. There had been increasing recognition of the activity in the past, but that recognition had not gone far enough for many operators who see wildlife tourism to be considered a niche product.

7.36 Increasing co-operation between operators is occurring and is also needed as well as public sector initiatives. Wildlife related businesses identified opportunities in terms of taking advantage of new commercial opportunities and sharing of good practice in what they consider a secure business environment. It should be noted, however, that our research has been conducted throughout with those businesses that have taken the time to assist, and that these businesses are probably biased towards those that want to co-operate with others.

7.37 Economic opportunities were identified by operators from the weak pound making Scotland more competitive: becoming cheaper for visitors from overseas and reducing the incentive to go overseas for UK residents. The possible recovery from recession was also mentioned as a positive opportunity.

Threats to the Wildlife Tourism Sector in Scotland

7.38 Meeting visitor expectations of quality and authenticity in terms of accommodation and service is seen as a potential threat. This is related to other threats described below, but specifically relates to building up expectations through marketing only for the visitors that make wildlife trips as a result to find that the reality on the ground is not what they were led to believe
would be waiting for them. Operators are finding that client expectations are much higher than they were due to increased travel experiences and increased standards of living at home. Scotland must therefore go ‘the extra mile’ to meet them. There was consensus amongst operators during the in-depth interviews that there are higher expectations across the wildlife watching spectrum particularly with regards to wildlife experiences, guiding, interpretation, accommodation, food and service.

7.39 Wildlife watching expectations have been fuelled by the media and particularly television programmes that show “close up and personal views of wildlife” which cannot always materialise on the day. This expectation may vary between each segment of the wildlife tourism market but particularly where the focus is on charismatic species that have a mass or universal appeal. This makes running tours very difficult in terms of tourist satisfaction as these tourists can have a very narrow fixation on seeing these charismatic species and high expectations which are impossible to guarantee. These general, casual tourists can be more difficult to satisfy than the serious wildlife watching sector that have a broader interest and understand the chance factors of wildlife watching. As this boat operator explains: “We try to emphasise that they won’t necessarily see the dolphins, not 100% but hard as you try to steer it away from that, that’s what people want. There are a percentage that are enjoying being out there, enjoying whatever they see and they are delightful to have on board but there are a significant percentage that just want dolphins. You’ll get them coming back in and you say ‘how did you get on what did you see’ and they’ll say ‘oh nothing’. They can have seen porpoise, they’ll have seen seabirds but they didn’t see dolphins. There’s a very narrow mindedness in some people”.

7.40 Built developments cause conflicts with wildlife activities, both by disturbing wildlife itself and by making an area less attractive for visitors. The development of wind farms in many rural areas was viewed as a threat to wildlife tourism by a small minority of operators that took part in the qualitative research. Other developments, from transport infrastructure to housing, golf courses and other buildings also affect wildlife and wildlife tourism and were raised as concerns by operators and NGOs.

7.41 Business complacency can weaken any industry’s competitive position. Should businesses in the wildlife tourism industry see visitors arriving in record numbers, and those numbers being sustained over a period of time, they may see little need to re-invent themselves, to innovate and develop new products, or to train staff and improve quality. Businesses in the in-depth interviews reiterated that there was no room for such complacency given the increasing customer expectations and the threat of competing near-European destinations.

7.42 Financial insecurity of businesses is a concern in any industry that is dominated by small firms. Wildlife tourism is affected by this as is the tourism industry in general, as small operators often do not have the financial resources to withstand short-term losses. While the 2009 recession has not had serious consequences for the operators in our research, this may be largely due to the growth in wildlife tourism itself which has continued a trend of growth. Financial insecurity remains a threat for the future.
7.43 The threats to Scottish wildlife tourism are identified in terms of an initial increase in visitor numbers leading to **product deterioration** and a subsequent decline in visitor numbers. This was very much the concern of operators and NGOs rather than tourists. However several dedicated, serious, wildlife tourists encountered on-site also spoke of increased visitation to Scotland’s wildlife sites and a potentially deteriorating experience: “Scotland has got too many wildlife visitors now…there is too much pressure on the environment in places, especially like Chanonry Point, Speyside and Mull”.

7.44 These threats are essentially related to a possible decline in the visitor watching experience. This possibility might come about for two reasons. The first is that the operators may destroy the product by reacting to the possibility of increased numbers of visitors in ways that are likely to cause disturbance to the wildlife. The second is the attitudes of the visitors themselves in that they may have unrealistic expectations both in terms of the wildlife and the quality of the experience. Thus regardless of when they come they expect to see the wildlife they want to see, which puts pressure on operators to find those species, which in turn can often cause disturbance to nesting sites, setts and other habitation. In addition they want a quality product but do not necessarily want to pay for it because they see wildlife as a ‘free’ good, which can also lead to disturbance of the wildlife. Both these reasons could lead to a reduction in satisfaction with the visitor experience provided and, given competition from other European wildlife destinations, a reduction, rather than an increase in demand.

7.45 One particular aspect of product deterioration is that the more serious wildlife enthusiasts’ expectation of unrestricted access to animals in their natural habitat is threatened by the development of visitor centres, car parks and other facilities that encourage higher visitor numbers. Strategic management is required to mitigate the effects of product deterioration, in

- codes of conduct to ensure that wildlife habitats are not damaged and that wildlife is not adversely affected by visitors;
- recognition of the concept of carrying capacity, that there is a limit on visitor numbers before the wildlife, and the wildlife experience, becomes tarnished, and also that individual businesses are ill equipped to constrain numbers where multiple businesses are in competition to take visitors to the same site.
- product differentiation, in restricting development in some areas to keep them authentic for the markets that value authenticity highly while developing other areas to take the volume of visitors who are more concerned with comfort and the probability of seeing a particular (usually iconic) species.

7.46 **Foreign competition** is clearly a factor, and while many operators are concerned that if the pound were to strengthen they would see customers going overseas, there was little recognition of where the foreign competition was coming from. This may be because the diversity of the market means that different segments wanting to view different species each have their own set of foreign competitor. When asked in the business survey which country is Scotland’s biggest competitor for wildlife tourism, a variety of answers were given by respondents. Many respondents (29%) answered that they did not know. Many others were relatively noncommittal (e.g. “Eire? Norway?”; “not
sure, perhaps somewhere like Iceland*), but of those that did volunteer an answer, 17% mentioned Scandinavia (or a Scandinavian country), 15% Africa (or an African country) and 12% England. In the context of a dynamic industry, however, it should also be noted that competition can drive up standards and may benefit an industry.

7.47 The growth in DIY wildlife tourism presents a threat to many wildlife businesses, as tourists may turn in increasing numbers towards independent bookings and looking for wildlife themselves rather than seeking out guides and organised viewing opportunities. In part this reflects a general trend in tourism towards independent bookings as tourists who have visited a destination once become much more confident in travelling independently on subsequent trips to the same, or similar, destinations, as well as increased ease of making such bookings. For wildlife tourists, this translates to those who are more confident not just in being able to book suitable accommodation but more importantly those who through previous visits have become more knowledgeable about the wildlife, where, when and how to find it, and so no longer need organised guides or interpretation. In addition, general tourists are becoming, through other information sources such as the internet and television programmes, more confident in being able to see wildlife without the help of tour guides. Indeed tourists often described themselves as “DIY wildlife tourists” who would seek out nature reserves or places where wildlife is renowned. They do not necessarily want to be confined in a group or constrained by time.

7.48 These DIY tourists are perceived, by operators, not only as a missed financial opportunity but also that they may become so significant in numbers that they become the major threat to wildlife disturbance, and their impacts on wildlife cannot be controlled by codes of conduct or regulations on firms. Some operators looked upon this group as a future opportunity and saw the possibility of offering new products to access this market in terms of information provision, recommended independent itineraries and suggested modes of responsible behaviour around wildlife.

7.49 The lack of coherent strategy is related to the weakness of “lack of clear strategic leader”, but relates more to the threats of what might happen in the future if this problem persists. This was noted by tourists who took part in the focus groups but was recognised more as a lack of wildlife focused, integrated marketing. Operators on the other hand noted the absence of a coherent wildlife tourism development strategy.

7.50 Finally, there is concern that government interest may be short-lived, and funding and support for wildlife tourism could be cut even further. This concern of operators may be partly related to the reasons for which they were being interviewed and involved in workshops, that is that they saw this study as being an indication of government interest and were worried that such interest would not be sustained.

Recommendations and Themes for Further Consideration

7.51 This section discusses some of the areas emerging from the discussions that took place with businesses and tourists which could be further considered in developing the wildlife tourism industry in Scotland.
7.52 Time and again the issue of representation of wildlife in national tourism marketing has been perceived as a problem by operators and tourists. Recognising that VisitScotland does have a dedicated wildlife tourism site, has included wildlife images in broader campaigns and does undertake targeted marketing to wildlife tourists, the industry perceptions of poor representation of wildlife do have to be considered carefully, possibly by a review of national level marketing for wildlife that should determine if the industry views on this representation are correct or if there are problems of representing what national level marketing bodies are doing to the industry. Such a review could then determine necessary actions, which might be greater communication of marketing to operators, including how they can tie in their products to forthcoming national level campaigns, or creating more effective and integrated web-links, involving the industry in improving current marketing, and/or working more closely with Wild Scotland on campaigns that satisfy the needs of the current wildlife tourism sector.

7.53 The fact that the key months for wildlife tourism are on the shoulder of Scotland’s main summer peak season makes it possible for wildlife tourism to extend the tourist season. VisitScotland could also consider whether the growing markets in wildlife tourism, such as the post-Springwatchers and ‘activity plus wildlife’ tourists, could be markets where they can get a greater return on marketing spend than some other markets that they currently give greater attention to. One way to do this might be to directly promote the opportunities to see wildlife in a region alongside existing attractions.

7.54 Wildlife tourism infrastructure can be improved in many ways, such as through more or improved wildlife watching infrastructure (e.g. hides, picnic benches, lay-bys) in appropriate locations, marine parks, better signage of attractions and better public transport infrastructure in remote areas. A review of wildlife tourism infrastructure would highlight specific cases and ways in which improvements can be implemented. It should also review infrastructure provided by private businesses, such as hides and visitor centres, and determine how, within funding arrangements, to ensure a common minimum quality of visitor experiences.

7.55 Various product development improvements can be developed by the public sector or private sector collaboration, such as a website (or part of another website, such as VisitScotland’s or Wild Scotland’s websites) giving more comprehensive information about wildlife in Scotland and where and when it is visible. Greater use could be made of literature and websites to promote wildlife maps, itineraries and guides as to what is available to see in a particular area at a particular time of year. Given the potential misunderstanding between private sector businesses and public sector authorities there should be closer attention paid to improving the communication channels from public sector departments. Within the current economic climate, funding new ventures or campaigns is likely to be challenging, therefore greater energy and emphasis should be placed on partnership and collaborative campaigns. This would go some way to overcome the perception from the private sector that there is a lack of ‘joined-up’ thinking.
7.56 Resource and visitor management is another area for consideration, with the potential as things stand for tourism numbers to not only damage the wildlife tourism industry but to lead to irreversible damage to wildlife. While statutory instruments do exist, such as the EU Habitats Directive that prohibits deliberate or reckless disturbance of a cetacean, resource protection at public sites needs to go beyond this to avoid a “tragedy of the commons” whereby different operators, or visitors acting independently, compete for closer views of wildlife. The extent to which voluntary codes of conduct between operators can address these problems could be considered. Carrying capacities could be considered at locations that have significant numbers of wildlife tourists, decided upon and then maintained by careful management of visitor numbers.

7.57 Quality standards within the wildlife tourism industry is another theme emerging from this research project, with emphasis on how accreditation, qualifications or training can be provided for wildlife guiding and interpretation activities. The public sector and industry could investigate the costs and benefits of such schemes, which would enhance the product as well as improve the recognition of tour guiding as a career choice and help to address resource and visitor management issues. While many operators will see this as something that they already do, the costs of accreditation should be low for those who are already providing skilled and knowledgeable guides that meet accreditation criteria, but would also protect them from the negative implications that other guides may have on the image of the wildlife sector in Scotland.

7.58 Finally, the strategic management of the sector has been highlighted as a weakness by operators. A stock-take of public sector and collaborative private sector activities relating to wildlife tourism would be a first step and should lead to the development of a strategic plan with the ability to encompass marketing, funding and if necessary legislative changes to provide joined-up support.
8 SUMMARY OF FINDINGS

8.1 The net economic impact of wildlife tourism in Scotland is £65 million, with 2,763 FTE jobs in existence because of the activities of wildlife tourism in Scotland.

8.2 In total, 1.12 million trips are made to or within Scotland for the primary purpose of viewing wildlife. Around half of these trips are made by domestic (UK) tourists. A total of £276 million is spent on these trips, with the majority of expenditure being by domestic tourists.

Table 15: Summary of Results for Wildlife Tourism

<table>
<thead>
<tr>
<th></th>
<th>Trips (m)</th>
<th>Proportion of 2008 Totals (%)</th>
<th>Nights (m)</th>
<th>Proportion of 2008 Totals (%)</th>
<th>Spend (£m)</th>
<th>Proportion of 2008 Totals (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic tourists</td>
<td>0.63</td>
<td>5.2</td>
<td>2.8</td>
<td>6.3</td>
<td>208</td>
<td>7.4</td>
</tr>
<tr>
<td>Day visitors</td>
<td>0.41</td>
<td>*</td>
<td></td>
<td></td>
<td>14</td>
<td>*</td>
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<td>Overseas tourists</td>
<td>0.08</td>
<td>3.1</td>
<td>0.72</td>
<td>3.7</td>
<td>54</td>
<td>4.4</td>
</tr>
<tr>
<td>Total</td>
<td>1.12</td>
<td>*</td>
<td>3.5</td>
<td>5.5</td>
<td>276</td>
<td>*</td>
</tr>
</tbody>
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* Proportions of national totals cannot be calculated where day visitors are included because of the lack of up-to-date data on day visits.

8.3 With 0.63 million domestic tourism trips, 5.2% of all domestic tourism trips to Scotland are being primarily motivated by wildlife. 6.3% of domestic tourism nights and 7.4% of domestic tourism expenditure in Scotland is primarily motivated by wildlife.

8.4 0.41 million trips are made by wildlife day visitors, with £14 million of expenditure. Due to no up-to-date relevant data on total numbers of day visits, it is not possible to show what proportion of all day visits are primarily motivated by wildlife.

8.5 There is uncertainty regarding our estimates of overseas tourism trips, nights and expenditure, but the central estimate is that 80,000 trips are made to Scotland by wildlife overseas tourists (3.1% of the total), spending 720,000 nights in Scotland and £54 million. Spending by overseas wildlife tourists therefore makes up a significant minority of total wildlife tourism spending in Scotland.

8.6 Regionally, wildlife tourism is concentrated in the Highlands and Islands (with 50% of wildlife trips, 45% of wildlife tourism nights and £124 million of expenditure by wildlife visitors. The West Coast and Islands, Loch Lomond & Trossachs is the second most important region for wildlife visitors, with 23% of trips and nights, and £65 million of wildlife visitor expenditure.

8.7 This spending by wildlife visitors contributes £156 million to Scottish GDP, and employs approximately 7,500 FTE employees. This includes gross value added and employment in the supply chain from which wildlife tourists purchase products, which includes all the products that they purchase, not just wildlife attractions. Regionally, wildlife tourism in the Highlands and Islands contributes £78 million to the Scottish economy and generates 3,500 FTE jobs.
8.8 Wildlife tourism is a more complex market than simply classifying tourists as being either primarily motivated by wildlife or not. Tourists encountered at wildlife sites and by tour operators ranged from being highly involved and motivated by wildlife watching to it being a substantial but not exclusive interest and finally to it being a casual and passing interest for the day. Wildlife operators see the majority of their visitors as combining a strong interest in wildlife watching with other activities, such as walking, cycling, touring, sightseeing, photography, history, culture and visiting distilleries, which may make up the primary purpose of their visit.

8.9 Operators claim that their clients are comprised mostly of middle-aged, empty-nest, professional, middle-class couples who enjoy experiences in nature and are looking for new interests to follow. Other client groups include overseas visitors, families and a recent growth in domestic (Scottish) clients. Many such tourists belong to organisations such as the Wildlife Trusts and RSPB who also influence their decision to visit Scotland. Operators and observations reveal a number of people with a ‘new interest in wildlife’ instigated by either life stage (usually empty nesters) and/or television programmes, especially Springwatch.

8.10 Wildlife watchers often referred to their preferred independent style of travel and their ‘DIY’ method of wildlife tourism whereby they would travel with binoculars and sometimes a telescope and cameras, and be on the lookout for any wildlife watching opportunities such as walking in nature reserves or along the coastline. There was general consensus that in order to capitalise from this market and avoid untold disturbance to species and habitats, operators need to stress how much easier it is to see focal species with the help of a guide.

8.11 There is some evidence to show that wildlife tourism has been growing in recent years, although this falls short of accurate estimates of wildlife tourism trips and spending on a year-by-year basis, and that industry opinion is that it will continue to grow in the future. Developments such as the media coverage of wildlife in popular television programmes, increasing environmental awareness and a move away from long-haul destinations is thought to have helped the wildlife tourism sector weather the effects of the recession, but also show its potential for future growth.

8.12 The SWOT analysis conducted as part of the study was drawn from workshops and interviews with actual and potential tourists and businesses involved in the wildlife tourism industry and points to themes that could be further considered in this sector. The SWOT analysis indicates that further consideration would be useful in the areas of strategic management, national level marketing, infrastructure, product development strategies, resource and visitor management and quality standards within the wildlife tourism industry. In addition, the research indicated that there are industry perceptions of problems with national level marketing and support for wildlife tourism. Recommendations therefore include points on the strategic management of the sector and improved communication of activities between public sector agencies and industry.
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