

Wildlife Attraction: Visitor Expenditure Model

User Guide

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1: Measuring the value of UK wildlife

- 1.1 Attractions designed to protect our wildlife and enable people to learn about and enjoy UK biodiversity, are increasingly being asked to estimate the contribution that they are making to their local communities. This should be seen as a positive step as the public sector seeks to gain a better understanding of the importance of wildlife attractions in supporting local economies, employment, education and general well-being. The difficulty, however, is that in order to justify public sector support and/or protection from alternative land uses, this contribution is required to be expressed in monetary terms. This is not a straightforward task.
- 1.2 The expenditure benefits that the model seeks to estimate are only one of many benefits that wildlife sites bring to both residents and the population of the UK. They provide protection for certain species, a basis for learning and education, support social groups and are a source of fun and entertainment for visitors. It is important that the value of these roles is not lost or that the expenditure or economic benefits are seen as the only measures of benefit. The model is intended to assist in calculating the net difference that the sites make to visitor expenditure.
- 1.3 The most tangible monetary activity stimulated by wildlife is its role in encouraging visitors – both holidaymakers and day-trippers – into a locality to spend time and money. The extent to which a wildlife attraction can claim to have stimulated visitor expenditure in a locality depends on the type(s) of visitor and the characteristics of the attraction. Moreover, the extent to which this expenditure then remains within, and circulates around, a local economy depends on the characteristics of the local economy in question. Estimating the economic impact of visitors can be a costly exercise, involving extensive visitor surveys and trained economic expertise.
- 1.4 The ‘Wildlife Attraction: Visitor Expenditure Model’ provides a tool for estimating the economic impact generated by tourists visiting a given attraction. It is not a substitute for the detailed survey work and economic analysis described above but does provide a starting point or benchmark for estimating the impact of visitors to wildlife attractions. The model also allows for more detailed attraction specific information to be fed into the model if, and when, this becomes available. Note also that this does not include the direct expenditure of the site itself on, for example, maintenance work, construction, direct employment that is not by visitor spending, such as retail and marketing. All expenditure that, in theory would also represent economic activity. The model only reflects the visitor expenditure element.
- 1.5 This User Guide explains the principles of the model and how it should be used. It also provides guidance for improving the robustness of information fed into the model, through, for example effective design of visitor surveys and interpretation of the subsequent results.

Using this guide

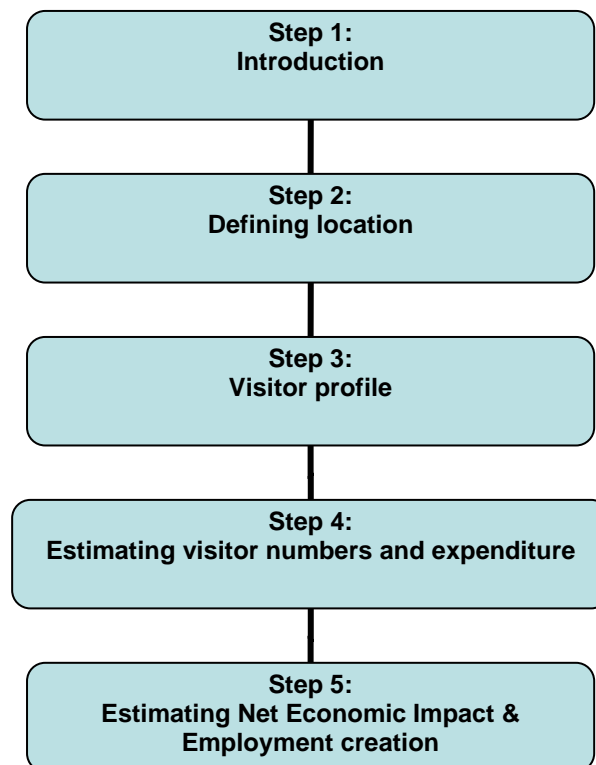
- 1.6 This User Guide is for the *Wildlife Attraction: Visitor Expenditure Model* which can be found on the England Biodiversity website¹. It is designed for anyone interested in estimating the economic impact of visitors to wildlife attractions. Its principle use will be to attraction managers applying

¹ At: <http://www.ukbap.org.uk/ebg/library.asp>

for or justifying public sector support and to the public sector themselves wishing to understand the role of wildlife attractions in the local tourism economy. As well as providing an estimate of the **economic impact** of a given attraction on its locality, the model also helps to explain **how** attractions are impacting upon their localities and the key **influencing variables**. This User Guide also provides advice for **designing local visitor surveys** that could help improve the accuracy of future economic impact estimations. These survey tips can be found in Annex B. Annex A provides a series of worked case study examples of how the model works.

- 1.7 Using this model the economic impact of attractions can be assessed with a minimal amount of data on the attraction and its surrounding tourism market. However, where this information exists, the model allows for this data to be included/over-ride estimates generated by the model. The model has five key steps illustrated in Figure 2.1 below. The User Guide will take you through each of these steps, explaining their importance and role in the process.

Figure 2.1 Estimating the visitor expenditure of wildlife attractions



2: Introduction and Defining the location

Step 1 – Introduction

STEP 1: MODEL INSTRUCTION: Insert the name of the attraction in the space provided in Step 1 and move to Step 2.

Step 2 – Location – understanding and using multipliers

- 2.1 Defining the local area is an important task. The aim of the model is to estimate the economic impact of wildlife attractions on local communities. The model assumes that the local area encompasses what is considered to be the local economy surrounding the site. That is, it has sufficient infrastructure for holidaymakers to stay overnight, choose from a range of things to see and do and have access to facilities such as restaurants, basic retail outlets etc. Equally, however, the area should not be so big that it becomes very difficult to argue that day-trippers have been encouraged into the locality (since most would come from within this area).
- 2.2 All of the assumptions and variables that have been used to develop the model are based upon the type of locality described above. For an accurate estimate, therefore, it is vital that the locality is clearly defined. Three examples are provided below:

EXAMPLE 1: LOCH FRISA HIDE - MULL SEA EAGLES

Loch Frisa Hide is situated on the Isle of Mull an island in the Inner Hebrides off the Scottish west coast. It is approximately 40km from north to south and has a population of around 2,700 residents, 1,000 of whom live in Tobermory the island's largest town. The island is well served by public transport from the mainland and each year receives an estimated 400,000 visitors.

EXAMPLE 2: CONWY NATURE RESERVE

The Conwy RSPB Nature Reserve is situated on the bank of the Conwy estuary, only two minutes from the main A55 expressway, at the head of the Conwy Valley. Conwy itself is a tourist town with a population of approximately 110,000 residents, in which the local economy is primarily made up of public services, wholesale and retail trade and hotels and restaurants.

EXAMPLE 3: SALTHOLME, TEESIDE

Saltholme will be a fantastic new wildlife experience in Teesside. It will transform 1,000 acres of former industrial land into a world class nature reserve. The Teesside Urban Area has a population of 365,000 people and is made up of the seven urban sub-areas of Billingham, Easton & South Bank, Ingleby, Middlesbrough, Redcar, Stockton-on-Tees and Thornaby.

STEP 2: MODEL INSTRUCTION (i)

1. Type the locality description into the text box

Understanding and applying multipliers

- 2.3 When holidaymakers visit an area, they spend money on accommodation, activities, food and drink, fuel and other retail products. Although on average day-trippers tend to spend less than holidaymakers and do not use accommodation, they can also make a valuable contribution to the local economy, particularly as, unlike holidaymakers, they may well visit two or three times a year and visit outside the main tourist season. This expenditure by holidaymakers and day-trippers is termed *direct* expenditure as it is spent by tourists directly in the local economy. This expenditure stimulates two multiplier effects:
1. ***Indirect (or supply) multiplier***: once direct expenditure has taken place, the increase in demand to produce the additional output will in turn stimulate further demand for goods and services.
 2. ***Induced (or income) multiplier***: when output is increased there is an increased demand for employment and this, in turn, increases employee incomes. This can cause further spending in the local economy.
- 2.4 Clearly the cycle doesn't end there, as indirect and induced expenditure stimulates further rounds of spending in the local economy. Multipliers are based on the assumption that each round of expenditure is smaller than the previous one until eventually the full economic effect is complete. The size of the multiplier effect is influenced by two factors. Firstly, individuals, whether business owners or employees, save as well as spend their income, meaning that only a proportion of expenditure will re-enter the economy in the short to medium term. The extent to which individuals spend and save is largely influenced by national economic factors such as interest rates and consumer confidence. The level of spending that will result from an increase in income is termed the marginal propensity to spend (MPS). Secondly, as subsequent rounds of expenditure occur, spending will 'leak' out of the local economy as spending takes place in the wider economy. The size of leakage depends on two key variables: geographic location and population density:
- ***Geographical location*** - every economy is structured differently and reacts differently to an increase in demand, which in turn affect the multiplier values.
 - ***Population density (type of area)*** - urban economies tend to be more self-sufficient than rural economies, i.e. supplies can be sourced locally, meaning that they tend to have less leakage than rural economies.
- 2.5 By following the instructions below, the model can assign the most appropriate multipliers for your region.

STEP 2 MODEL INSTRUCTION 2 (ii)

1. Using the drop down box, select the geographical area in which the attraction is based (e.g. North England).

2. Using the drop down box, select the type of area that the site is located in, i.e. remote rural, rural or urban edge. Guidance on how to clarify an attractions population density can be found by following the web links below and using the following classifications:

For England and Wales:

http://www.statistics.gov.uk/geography/downloads/Introductory_Guide.pdf

<http://www.statistics.gov.uk/geography/nrudp.asp>

Rural sparse = Remote Rural

Rural less sparse = Rural

Urban = Urban Edge

For Scotland

<http://www.scotland.gov.uk/Publications/2004/06/19498/38787>

Remote rural = Remote Rural

Accessible small towns, remote small towns and accessible rural = Rural

Large urban areas and other urban areas = Urban Edge

For Northern Ireland

http://www.nisra.gov.uk/statistics/financeandpersonnel/DMB/ur_gaz.pdf

Village = Remote Rural

Small town, intermediate settlement = Rural

Urban area, Large town, medium town = Urban Edge

3: Visitor profile

Understanding and applying attributability

- 3.1 The motivations for deciding to visit a particular locality for most staying tourists are complex, interdependent and hard to unravel. With the exception of a few iconic attractions such as Alton Towers, Blackpool Pleasure Beach, and possibly the Eden Project, there are very few attractions in the UK that can argue to be the primary influence for visitors staying in a region.
- 3.2 Whilst there are undoubtedly enthusiasts and a small proportion of holidaymakers and day-trippers who are willing to travel across the UK and beyond to see a particular wildlife species, the majority of staying tourists visiting wildlife attractions are doing so as part of a wider holiday experience. The challenge, therefore, is to estimate the amount of spending that can be claimed to have been influenced by an attraction. That is, the amount of spending that we can attribute to the attraction. Measuring this attributability involves estimating:
- the proportion of visitors likely to state that the attraction was the **main reason** for them taking a holiday or day-trip in the locality. Where this is the case, attractions can claim all (or the majority) spending incurred whilst on the stay/trip in the locality since without the attraction, none of the expenditure would have been spent in the locality.
 - the proportion of visitors likely to state that the attraction was **one of several reasons** for them taking a holiday or day-trip in the locality. Where this is the case, attractions can claim a proportion of all spending incurred whilst on the stay/trip in the locality since the attraction has played a part in influencing the decision to enter and spend in the locality.
 - the proportion of visitors likely to state that the attraction was **not one of the reasons** for them taking a holiday or day-trip in the locality. Where this is the case, attractions can claim none of the spending incurred whilst on the stay/trip in the locality (including that spent at the attraction) since the attraction has played no part in influencing the decision to enter and spend in the locality. In this case the spending that incurred at the attraction would be simply displacing expenditure that would have occurred elsewhere in the study region.
- 3.3 In estimating these proportions, the model assumes that there are two factors that influence attributability. The first is population. On average there is far less tourism infrastructure in remote rural and rural areas than there is in built up urban economies. There are so many things to see and do for tourists in urban cities and towns that it is very hard to attribute high levels of their spending to one particular activity – such as a wildlife attraction. In contrast, holidaymakers and day-trippers attracted to wildlife attractions in rural areas are far more likely to have been in areas because of the attraction itself since there is limited alternative activity. The second factor is the characteristics of the site.

Characteristics of the site

- 3.4 All wildlife attractions differ in the types of species, how and when they can be viewed and the types of facilities available to visitors. These characteristics influence the type of visitor that visits the attraction, the distance that visitors are prepared to travel to the attraction and the level of spending that is incurred whilst there.
- 3.5 The model deals with this by asking a series of questions, each weighted to provide an overall score which reflects its strength as an attractor to the area. Sites that have unique species or represent the best places for seeing them are the most likely to attract visitors to the area, rather than ones that do not. The range of facilities is also a factor, but a less powerful one in attracting people to the area. The questions in the model and the weightings are shown in the following Table.
- 3.6 Depending on the responses, the site will generate different scores. These are aggregated to give a total. If the total is more than 50, the site is considered to have high attributability, i.e., it attracts a higher proportion of additional visitors to the area. In this instance, the site is assigned category 1. A score of between 35 and 50 gives a medium rating, and would be assigned category 2, and less than 35 means the site is less likely to generate new visitor expenditure and would be assigned category 3. The category of the site on this basis, 1 - high, 2 – medium or 3 – low is used in the model to determine the level of “additional” expenditure that is generated by visitors.
- 3.7 These scores are based on our assessment of the factors most likely to attract new visitors. Iconic species, more specialist visitors, the uniqueness of the site and the number of habitats are considered to be the most important factors. The other facilities are less important.

Question	Max score
Does the attraction have at least one iconic species *	15
Which of the following best describes the uniqueness of this site as a place to see this/these species	20
How many distinct wildlife habitats within this site?	20
Which of the following best describes the visitor profile	10
Does the attraction have staff who look after visitors as part of their responsibilities	2
Does the attraction have hides / watch points designed for prolonged viewing	2
Does the attraction have interactive interpretation using computers, ear phones, sounds etc	2
Does the attraction have a café/restaurant	2
Does the attraction have regularly (at least once a day) serviced toilets	2
Does the attraction have a souvenir shop	2
Does the attraction have facilities for school trips (sheltered lunch areas, work areas etc)	2
Total	79

* **An iconic species should be both rare and regionally symbolic**

- 3.8 It is important to note that there is no optimum combination of population or attraction characteristics that maximises the economic impact of a wildlife attraction, as illustrated by the

example below. Within this, however, it is important to note, that with a given geographical location and population density, attractions can maximise the economic impact by providing more services on-site.

An example of the trade off between attributability and multipliers

A whale watching attraction in a remote rural area can claim a high proportion visitor spending since it can reasonably claim to have drawn visitors into an area where they would not have visited if it was not for this unique attraction. However, with limited infrastructure in remote areas it is likely that a high proportion of visitor spending will leak out of the economy within its first few cycles resulting in low multiplier values. (i.e., the attraction and local hotels will tend to source supplies from companies outside area, and employers are likely to spend a high proportion of their incomes outside the area).

- 3.9 In many economic impact models, resident expenditure, i.e., expenditure by residents of the defined locality, is simply ignored as it not deemed to be additional. That is, it is assumed that this expenditure would have been incurred in the locality on another activity if the attraction was not visited or did not exist.
- 3.10 Due to a lack of national and regional survey data, the model is unable is measure the attributability of resident expenditure and has assumed their expenditure to not be additional to the locality. This will have the affect of marginally underestimating the true economic impact of the attraction. However, due to relatively low spending levels, residents usually only make up a very small proportion of overall economic impact. This is not to say that residents do not have an important role to play in wildlife sites. Indeed, school trips, specialist local interest groups and general residents can all make an important contribution to creating the ‘sense of place’ required of any successful victor attraction and provide vital out of season income. In turn, wildlife sites can provide important educational and quality of life benefits to local residents. Whilst these benefits are not measured in this economic impact model, they should still be recognised.
- 3.11 If information regarding the attributability of holidaymakers, day-trippers is known, this can be inserted into the model (see Model Instruction Step 5 and Survey Tips in Annex A).
- 3.12 Combining this information with the population density information allows the model to assign a range of attributability proportions to the attraction. The final step, therefore is to estimate the level of visitor expenditure which the multipliers (Step 2) and attributability proportions (Step 3) can be applied. This is the task in Step 4.

STEP 3 MODEL INSTRUCTION

Complete the questions. In some cases there are boxes to tick and in others there is a drop down menu. The results of these questions determine whether the site is likely to attract new visitors to the area or region or is more likely to be something that visitors find out about once they are in the area.

1. Broadly, the more distinctive the site and the wildlife, the more likely visitors will be to travel to it. Enthusiasts are more likely to make special trips to these sites compared to general visitors.
2. If the site has an iconic species, state the species and describe why it fits the definition selected in the space provided.

4: Estimating visitor numbers and expenditure

- 4.1 Understanding the scale, type and behaviour of attraction visitors is the final step of the model that demands user input. In most cases visitor numbers and profiles will be available and can simply be used in the model. Where this is not the case, estimates will be required.
- 4.2 In some cases the model will be used before a site has started operating or is in planning. In this case the estimates of visitor numbers and profile will be part of a market appraisal. Where a site is open but more visitor detail is needed an evaluation survey will help capture the data needed. Both of these processes are described below and there is more detail on carrying out a survey in Annex B.

Market appraisal

The key stages of a market appraisal involve:

- Defining the attractions profile:
 - Capacity – how many visitors can the site cope with without detrimental effects to the environment and its operation
 - facilities – these would include gift shops, toilets, cafes, hides, guides etc.
 - defining the unique characteristics of the site – why will visitors come to this site rather than spend time at other attractions? What makes it unique?
- Understanding the national and local tourism market – including niche specific markets such as wildlife. The site operates within a wider tourism market that will already impact on the numbers and types of visitors that can be attracted. It is useful to consider how this site relates to other attractions and the joint marketing or ticketing that might be done to help build a collection of attractive places to visit.
- Assess catchments areas for day-trippers and holidaymakers – it will be necessary to consider where visitors are going to come from and how many. This will depend on the location of the site and the transport infrastructure
- Assess the profile of different types of visitors – how long will they stay, where will they stay, are they families, enthusiasts, school children, older people etc.
- Benchmark visits and spending against other similar attractions - other attractions can help provide benchmarks to help make estimates of numbers and profile

Evaluation

- 4.3 Once an attraction has been in operation for some time, it is far easier to assess the number of visitors, however, the only way to obtain an accurate picture of the type of visitor (general tourist, enthusiast, family etc) and behaviour (day-tripper, holidaymaker, spending off-site etc)

is to undertake a survey (see appendix B). Depending on the size of the attraction this can be an expensive exercise, fraught with sampling problems and questionnaire design issues.

4.4 An evaluation would capture:

- visitor numbers
- visitor profile
- expenditure on-site
- visitor origin and length of stay
- extent to which the attraction is the main reason for their visit to the area
- where else they would have visited had the site not been operating
- satisfaction and intentions to return.

4.5 The model has been designed to accommodate as much or as little of the above information that is available.

STEP 4 MODEL INSTRUCTION

Enter the number of weeks each year that the site or attraction is open.

Enter the number of weeks that the attraction is open in peak and off peak seasons. In most cases peak season will cover the 9 school holiday weeks of Easter (2 weeks), half term (1 week) and the summer holidays (6 weeks).

Estimate the average number of visitors per week in peak and off peak seasons.

Total visits will then be calculated

Estimate the percentage split for holidaymakers, day-trippers and residents. If the split between day-trippers and residents is unknown, assume a 50/50 split. Examples of this process can be found in the Case Studies (Annex A).

Spending will then be calculated based upon the average spending figures for your region. If spend per head is known, override the cells for holidaymakers, day-trippers and residents (spend per head includes spending on accommodation, fuel, food and drink etc).

5: Estimating net expenditure impacts

- 5.1 Step 5 calculates the net expenditure impact of the attraction and the level of employment that it safeguards/creates.
- 5.2 Both net economic impact and employment creation are broken down by visitor type (holidaymaker and day-tripper), allowing an understanding of relative impact of each of these groups. Within this, it is important to note:
- ***Net expenditure impacts*** – is the total monetary benefit that the attraction stimulates annually in the locality. This takes account of multipliers and attributability and relates to expenditure incurred both on-site and off-site.
 - ***Net employment creation*** – is the total Full Time Equivalent (FTE) jobs that the attraction supports in the locality. This takes account of multipliers and attributability and relates to employment both on-site and off-site.
- 5.3 The calculations take the visitor numbers (excluding residents) and multiply them by the estimates of average expenditure per trip. This gives the gross expenditure made by visitors during their trip. Only a proportion of this is attributable to the site. To allow for this, estimates of the proportion that can be attributed are used. These are based on the study examples and on an analysis of impact studies that have included survey work. The attributability reflects the role that the site plays in their decision to visit the area. Most economic impact studies will ask visitors whether the site was the “main reason”, “one of the reasons” or of “no importance” in their decision to visit”. The results are used to estimate the *net* number of additional visitors that can be attributed to the site.
- 5.4 The model simulates this by using the site characteristics as a proxy. Sites that are unique or more likely to attract enthusiasts will be more likely to have visitors that are in the area solely because of them. More generalist facilities are less likely to justify a trip from outside the area. The characteristics are used to allocate the site to one of three categories; high, medium or low attributability. In the high cases, higher estimates of attribution are used and in the low cases, lower values are applied.
- 5.5 This gives the value of the net new expenditure attributed to the site. The final stage involves applying multiplier values. These depend on the local economy. We use the categories of rural, remote rural and urban as well as the region that the site is in, to provide multiplier estimates. Because of the very limited evidence, many of the figures are based on the Scottish tourism Multiplier Study, which continues to be one of the few sources of tourism multipliers.
- 5.6 Applying the appropriate values, the model produces a net economic impact, which is shown in terms of the expenditure generated within the economy *as a result of* the site, and the employment that this level of expenditure is associated with.

STEP 5 MODEL INSTRUCTION

If the attributability of holidaymakers, day-trippers is known, simply multiply the attributability value by the total spending figure in Step 4. For example, if 5% of holidaymakers stated that the attraction was the main reason for visiting the area, and on average 30% stated that it was one of five reasons, this would mean that for 5% of total holidaymaker trip expenditure, the majority (90%)² could be assigned to the attraction ($0.05 \times 0.9 = 0.045$) and that for 30% of total holidaymaker trip expenditure, 20% (1 in 5) could be assigned to the attraction ($0.30 \times 0.20 = 0.06$). The values should be inserted in the appropriate attributability cell in Step 5 row 22.

² In order to counter the risk of sampling bias and unreliable responses it is not recommended that a figure above 90% of total expenditure is used.

Annex A: Case studies

The Conwy RSPB Nature Reserve is situated on the bank of the Conwy estuary, only two minutes from the main A55 expressway, at the head of the Conwy Valley. Conwy itself is a tourist town with a population of approximately 110,000 residents, in which the local economy is primarily made up of public services, wholesale and retail trade and hotels and restaurants.

The reserve has a purpose built centre and overlooks a lagoon where a range of birds can be seen all year round including black-tailed godwit, lapwing, shelduck, skylark and water rail. It also has a number of footpaths that take visitors round a series of lagoons through flower-filled meadows and beside the estuary.

The reserve has a number of staff available to assist visitors and is suitable for all types of visitors from the keen birdwatcher to the beginner and is especially good for families with children's activity tables and trails. There is also a very active teaching programme catering for schools trips.

In addition to this, the reserve has a café and a shop as well as a picnic area and ample parking.

Key Characteristics

1. Geographical location: **WALES**
2. Density: **URBAN EDGE**
3. Attraction characteristics:
 - **No iconic species**
 - **One of a number of good places in the UK for viewing species**
 - **3 habitats**
 - **Attracts a mix of holidaymakers and enthusiasts**
 - **3 hides and 2 viewing screens**
 - **2 nature trails (accessible by wheelchair and pushchair)**
 - **Shop and café**
 - **Visitor and information centres**
 - **Educational facilities**
4. Visitor Numbers: **57,000**
5. Holidaymaker/Day-tripper and Resident proportions and associated spend:

Figures provided

HOLIDAYMAKERS - 20%
DAY-TRIPPERS - 80%

Figures inserted into model

HOLIDAY MAKERS - 20%

DAY-TRIPPER - 40%

RESIDENT - 40%

(assumed 40% day-trippers from outside the locality, 40% residents)

HOLIDAY MAKER SPEND - £168 (taken from model, as unknown)

DAY-TRIPPER SPEND - £28 (taken from model, as unknown)

TOTAL IMPACT = £402,779

TOTAL FTE CREATION = 6.6

Otmoor RSPB Nature Reserve is a 'quiet enjoyment' reserve of wet meadows and reed-beds, located near Beckley Village, north-east of Oxford.

In the winter it is a haven for waterfowl, such as teal and wigeon. Whilst in the spring and summer it is home to songbirds and breeding wading birds, such as lapwing.

It is a 'low key' site and has limited facilities for visitors with only a few viewing screens, one visitor route and a small car park.

The RSPB bought the site in 1997 and since then have been adding to and restoring the site which has resulted over 260 ha of land and a lot more birds and wildlife – three times as many breeding wading birds and ten times as many wintering ducks as well as new species such as pochard, tufted duck, common tern, ringed plover and great crested grebe.

Key Characteristics

1. Geographical location: **SOUTH EAST**

2. Density: **RURAL**

3. Attraction characteristics:

- **No iconic species**
- **Large number of different bird species**
- **One of a number of good sites in the region to view species**
- **Tends to attract the enthusiast**
- **2 habitats**
- **Screens and viewing points**

4. Visitor Numbers: **3,000 - 4,000**

5. Holidaymaker/Day-tripper and Resident proportions and associated spend:

Figures provided

HOLIDAY MAKERS - 25%

DAY-TRIPPERS - 75%

Figures inserted into model

HOLIDAY MAKERS - 25%

DAY-TRIPPERS - 37.5%

RESIDENTS -- 37.5%

(assumed 37.5% DAY-TRIPPERS from outside the locality and 37.5% RESIDENTS)

HOLIDAY MAKER SPEND- £179(taken from model as unknown)

DAY-TRIPPER SPEND- £28 (taken from model as unknown)

TOTAL IMPACT = £13,513

TOTAL FTE CREATION = 0.2

Tees Valley International Nature Reserve in Saltholme will be a fantastic new wildlife experience in Teesside. It will transform 1,000 acres of former industrial land into a world class nature reserve. The Teesside Urban Area has a population of 365,000 people and is made up of the seven urban sub-areas of Billingham, Easton & South Bank, Ingleby, Middlesbrough, Redcar, Stockton-on-Tees and Thornaby. The aim of the site is to “be a place where birds and people come together in a way that stimulates fun, enjoyment and learning for all”.

The site is creating a number of new habitats and will attract a wide variety of birds and wildlife that will appeal both keen birdwatchers and families in search of an enjoyable day out.

Part of what was once an industrial site has already been transformed into a wild flower meadow and other derelict land has become a new wetland home for birds- part of the largest wetland creation project in the north of England. These habitats will attract exciting, rare and elusive bird species to the north east including bittern, marsh harrier, bearded tit and avocet as well as other wildlife such as kingfisher, mute swan and grey heron. The site is due to open to visitors in early 2008 and will feature the innovative Wild Bird Discovery Centre, the largest RSPB centre in the UK.

Key Characteristics

1. Geographical location: **NORTH EAST**

2. Density: **URBAN EDGE**

3. Attraction characteristics:

- **Iconic species**
- **One of a number of good sites in the UK to view species**
- **3 habitats**
- **Attracts a mix of holidaymakers and enthusiasts**
- **Large populist site**
- **Guided tours and watch points**
- **Visitor centre**

- **Café and shop**
- **Office space, meeting rooms and class rooms**

4. Visitor Numbers: **100,000**

5. Holidaymaker/Day-tripper and Resident proportions and associated spend:

Figures provided

HOLIDAY MAKERS - 54% (FROM OUTSIDE OF THE NORTH EAST REGION)
RESIDENTS - 46% (FROM OUTSIDE OF THE REGION)

Figures inserted into model

HOLIDAY MAKERS - 27%

DAY- TRIPPERS - 50%

RESIDENTS - 23%

(assumed a 50/50 split between holidaymakers and day-trippers in locality, i.e., 27% and a 50/50 split between day-trippers and residents in the locality, i.e., 23%).

HOLIDAY MAKER SPEND - £180 (taken from model as unknown)

DAY-TRIPPER SPEND - £28 (taken from model as unknown)

TOTAL IMPACT = £1,548,189

TOTAL FTE CREATION = 25.4

Loch Frisa Hide. The Isle of Mull is an island in the Inner Hebrides off the Scottish west coast. It is approximately 40km from north to south and has a population of around 2,700 residents, 1,000 of whom live in Tobermory the island's largest town. The island is well served by public transport from the mainland and each year receives an estimated 400,000 visitors.

Mull offers a wide variety of bird habitats that are attractive to many different birds, including birds of prey, fish eating birds, ducks, waders and wintering waterfowl. The biggest attraction to birdwatchers on Mull is the white tailed eagle (more commonly known as the sea eagle). Although sea eagles are resident all year round on Mull, most visitors come during the breeding season and the main public summer holiday season from Easter to September. RSPB Scotland and other partners have created a purpose-built hide at Loch Frisa to enable bird watchers to view the sea eagle.

According to a survey undertaken in 2003 the hide at Loch Frisa receives approximately 1,500 visits between May and July from both day-trippers and holiday makers.

Key Characteristics

1. Geographical location: **SCOTLAND**

2. Density: **REMOTE RURAL**

3. Attraction characteristics:

- **Iconic species**

- **Best place in the UK to view species**
- **One habitat**
- **Tends to attract the enthusiast**
- **Purpose built hide and viewing points**
- **Guided tours/visits**

4. Visitor Numbers: **3,000**

5. Holidaymaker/Day-tripper and Resident proportions and associated spend:

Figures provided

HOLIDAYMAKERS- 67%

DAY-TRIPPER- 33%

Figures inserted into model

HOLIDAYMAKERS - 67%

DAY-TRIPPER - 0%

RESIDENTS - 33%

(assumed all day-trippers to be residents as very few will visit the island from the mainland for just one day)

HOLIDAYMAKER SPEND - £208 (taken from model as unknown)

DAY-TRIPPER SPEND - £28 (taken from model as unknown)

TOTAL IMPACT = £60,505

TOTAL FTE CREATION = 1.0

Annex B: Survey tips

- B.1 Ensure that the area in which the attraction is located is clearly defined before conducting the survey. Are we more interested in the impact on the local community, the sub-region or the region? This definition is important in defining visitors and must be clear in the survey
- B.2 Include questions that will help define the catchment market/area of the attraction such as 'where did you travel from today'. This will help inform the definition of the attraction's surrounding 'locality'.
- B.3 With respect to additionality, ask respondents:
- was the attraction the primary reason for visiting the area?
 - if the answer to the above is no, ask, what were the reasons for visiting the area, and ask them to select from (allowing for multiple answers): visiting family and/or friends, revisiting as like the area, visiting other attractions (please state), just passing through, recommendation, like accommodation, other.
 - answers to these questions will enable calculation of attributability For example, if 5% of holidaymakers stated that the attraction was the main reason for visiting the area, and on average 30% stated that it was one of five reasons, this would mean that:
 - for 5% of total holidaymaker trip expenditure, the majority (90%)³ could be assigned to the attraction ($0.05 \times 0.9 = 0.045$); and
 - for 30% of total holidaymaker trip expenditure, 20% (one in five) could be assigned to the attraction ($0.20 \times 0.3 = 0.06$).
 - the same set of questions can also be applied to day-trippers.
- B.4 unless you are surveying every visitor to a particular wildlife site, consideration should be given to sampling. This requires:
- assessing the margin of error that you are willing to accept – this will depend on how you expect respondents to answer the majority of questions (i.e, those answers that are expected to be heavily skewed will be able to take a much larger margin of error than those which are likely to be closely split). The most commonly accepted margin of error is 5%.
 - defining the Confidence Interval – this determines the percentage of answers that will be at least one standard deviation away from the true answer (i.e., the answer that you would get if you surveyed every visitor). The most commonly used Confidence Intervals are 90%, 95% and 99%.

³ In order to counter the risk of sampling bias and unreliable responses it is not recommended that a figure above 90% of total expenditure is used.

- consideration of the population size - the larger the total population (all visitors) the larger the sample size will need to be in order to satisfy Confidence Interval and margin or error requirements. However, beyond 20,000, required sample sizes do not vary significantly.
- consideration of the response distribution – if responses are expected to be skewed (i.e., not evenly distributed) the lower the required sample size. If the distribution of answers is unknown use 50% (i.e., evenly distributed).

B.5 Examples of sample sizes for differing population sizes and Confidence Intervals are given in the tables below.

Sample size when population 5,000			
	Example 1	Example 2	Example 3
Margin of error	5%	5%	5%
Confidence Interval	90%	95%	99%
Population size	5,000	5,000	5,000
Response distribution	50%	50%	50%
Required sample size	257	357	586

Sample size when population 10,000			
	Example 1	Example 2	Example 3
Margin of error	5%	5%	5%
Confidence Interval	90%	95%	99%
Population size	10,000	10,000	10,000
Response distribution	50%	50%	50%
Required sample size	264	370	623

Sample size when population 20,000			
	Example 1	Example 2	Example 3
Margin of error	5%	5%	5%
Confidence Interval	90%	95%	99%
Population size	20,000	20,000	20,000
Response distribution	50%	50%	50%
Required sample size	267	377	643

B.6 When conducting the survey it will also be important to ensure that interviews are conducted at different times of the year, different times of the week and in different areas within the site. This will also help ensure that the sample is representative of the overall site visitor population.