

The Local Value of Seabirds



Estimating Spending by Visitors to RSPB Coastal Reserves and associated Local Economic Impact attributable to Seabirds



August 2010



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For more information about this report contact:
The Marine Team or the Economics Team
The RSPB, Sandy Bedfordshire, SG19 2DL
☎ 01767 680551

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1. INTRODUCTION

Wildlife watching in the UK

Wildlife watching is a popular pastime in the UK, as attested to by the success of the many nature reserves and parks across the UK. Though wildlife watching does not have to be restricted to nature reserves, they do provide a focus, and often facilities for the activity. In addition, there are often associated amenities such as hides, shops, cafes and toilets.

Moreover, wildlife watching is not restricted to the land. Boat trips to see marine wildlife are just as popular, while diving is a growing sport in UK waters as despite sometimes chilly waters, the sealife here is diverse and interesting as in warmer seas.

The RSPB offers large numbers of people the chance to see spectacular wildlife at its many reserves and viewing schemes. By making it easy for thousands of people to see birds, we hope to raise awareness and support for bird conservation. Many RSPB reserves feature terrestrial bird species such as birds of prey (peregrines, red kites, white-tailed eagles, hen harrier and ospreys), bee-eaters, capercaillie and choughs. But we also have coastal reserves that feature seabirds and in some cases we work with boat operators to either provide or encourage visitors to partake in seabird-watching boat trips.

Analysing the local economic impact of birdwatching

Nature conservation activities at reserves can bring significant local economic benefits through direct employment, reserve expenditures and use of local contractors. Furthermore, wildlife attracts visitors, who in turn spend money, bringing it into the local economy. Spending by visitors can benefit a wide range of enterprises in a local area, through direct, indirect and induced impacts, helping to provide income and employment for local people. These benefits are additional to, but often greater than, the direct economic impact of employment and expenditures by conservation organisations¹.

The case-studies in this report estimate the value of spending at some of the RSPB's seabird reserves across the UK.

¹ Shiel, A, Rayment, M & Burton, G (2002) *RSPB Reserves and Local Economies*. The RSPB, Sandy, UK.
http://www.rspb.org.uk/Images/Reserves%20and%20Local%20Economies_tcm9-133069.pdf

Seabirds & sealife

Seabirds provide a great seasonal spectacle. Every year, just under eight million seabirds from 26 species, such as gannets and terns, and the ever popular puffins, come to the shores of the British Isles to breed, often in spectacular colonies. Millions more waders, gulls, divers and seaducks, winter in and around our coasts and estuaries.

The UK and Ireland support a large part of the world breeding populations of a number of seabirds, including 90% of the world's Manx shearwaters and 68% of the world's northern gannets. Many of these breeding colonies can be seen on RSPB reserves.

One of the reasons why seabirds come to the UK to breed is the plentiful food supply. The shallow seas around the UK are very productive and support a diversity of species and habitats as rich as any in the tropics. Approximately half of the UK's wildlife is found in the seas around our coasts.

Conservation – Marine Protected Areas for seabirds

While our seas are productive, we also know that they are experiencing ever greater pressures and threats from human activities. Seabirds face many threats to their survival at sea, notably from unsustainable fishing practices, loss of feeding habitat or prey and from increasing competition with offshore development. We also know that recent breeding failures are part of a longer trend caused by climate change impacts on the food chain. Lack of prey species to feed chicks could lead to long-term loss of seabird colonies. Analysis of seabirds between 2000 and 2008 show that changes in population size of 19 of the 25 species breeding in the UK add up to an overall decrease of around 9%². Of the seabird species breeding in the UK, only northern gannet and great skua have sustained an upward trend in population size from 1969 to 2008. All other offshore surface feeders have started to decline in numbers at various points since the mid-1990s.

Seabirds, like all other wild birds are legally protected however, to date protection has, on the whole, been restricted to colonies on land. Seabirds only spend part of their life on land, when breeding and even then they depend on the sea for their survival – they forage for food, rest and moult at sea. At sea protection has been poor either as the result of non-application of legislation protecting internationally important populations or the absence of adequate legislation to protect nationally important populations. With the advent of the UK Marine & Coastal Access Act 2009 and the Marine (Scotland) Act 2010, and the promise of a Marine Bill in Northern Ireland, we now have the full suite of relevant legislation. The next step is to ensure that it is applied effectively and that marine protected areas (MPAs) are designated for those areas at sea which are important for seabirds.

² JNCC (2009) UK Seabirds in 2008. ISBN 9781861076113.
http://www.jncc.gov.uk/pdf/pub09_ukseabirdsin2008a.pdf

Economic benefits of seabirds and seabird MPAs

Traditionally it has been difficult to estimate the economic benefits of MPAs due to a number of factors – a lack of MPAs, a lack of economic studies of such MPAs that do exist, and a lack of understanding of the value of some of the benefits that MPAs can deliver. To try and overcome some of these barriers to estimating the benefits of MPAs for seabirds, we decided to instead estimate the benefits to local economies of a number of RSPB seabird reserves. This was based on the assumption that the benefits brought into the community by the reserve were dependent on the annual occurrence of the breeding seabirds whose continued survival is dependent on the sea. Therefore, protecting those areas at sea which are important for seabirds, such as foraging areas, resting and moulting areas, etc, is just as important to the continued delivery of benefits to the local economy as the protection of the colonies on land.

This report presents case-studies from four RSPB seabird reserves from across the UK:

- Bempton Cliffs Reserve, on East Yorkshire's North Sea coast;
- South Stack Cliffs Reserve, Anglesey, North Wales, jutting out into the Irish Sea;
- Mull of Galloway Reserve, Dumfries & Galloway, where Scotland's most southerly tip meets the northern reaches of the Irish Sea;
- Rathlin Island Reserve, off the north coast of County Antrim, Northern Ireland.

These case-studies, one from each UK country, give a snap-shot or provide an indication of the economic benefits that healthy, flourishing seabird colonies can bring to an area. And alternatively the potential losses that local economies could suffer should seabirds which are protected on land are not properly protected at sea using MPAs.

The range of visitor numbers and their expenditure are obviously influenced by other factors as well as the presence of seabirds, such as location, ease of access and associated facilities. However, we have tried to discount these additional factors through the questions we asked to visitors. Full details of the methodology can be found in chapter 3.

The case studies in this report update similar work published by the RSPB in 2006³ which looked at the benefits that a range of RSPB reserves and bird-related activities brought to local economies included a chapter on a greater number of seabird reserves and seabird-related activities.

³ Dickie I, Hughes J, and Esteban A (2006) *Watched like never before... the local economic benefits of spectacular bird species*. RSPB, Sandy, UK.
http://www.rspb.org.uk/Images/watchedlikeneverbefore_tcm9-133081.pdf

2. ECONOMIC BENEFITS OF SEABIRD RESERVES - CASE-STUDIES

2.1 Bempton Cliffs RSPB Nature Reserve

Introduction

The RSPB's Bempton Cliffs nature reserve is the best place in England to get up close and see breeding seabirds. The reserve, which was first purchased by the RSPB in 1969, and boasts a purpose-built visitor's centre and specially-created cliff top watch points. The reserve supports colonies of 200,000 nesting seabirds, including kittiwakes and puffins, and the largest mainland colony of gannets in England. The seabirds are best seen from April to August when they are breeding and rearing chicks at their colonies on the cliff-side. However the reserve and the visitor centre are open all year round.

The reserve employs four full-time and two part-time staff, as well as five part-time seasonal workers. In addition to its role as a local employer and the benefits it brings *via* tourism, the nature reserve hires local contractors for services such as cleaning, security and maintenance work on paths and the car park. There is a boat-tour operator offering sightseeing cruises around the sea cliffs themselves, and in 2008, the reserve leased out a contract with an ethical foods retailer in response to the growing number of tourists.

The following case-study seeks to demonstrate that seabirds play a vital part in the health of the area's local economy and tourism trade.

Visitor Survey

Visitor surveys were carried out between April and September 2009. In total, 186 questionnaires were completed, and when the members of their party were included, survey respondents answered on behalf of 497 visitors.

Details of methodology, sample sizes, visitor activities and expenditure, length of stay, etc. can be found in the full length methodology in chapter 3.

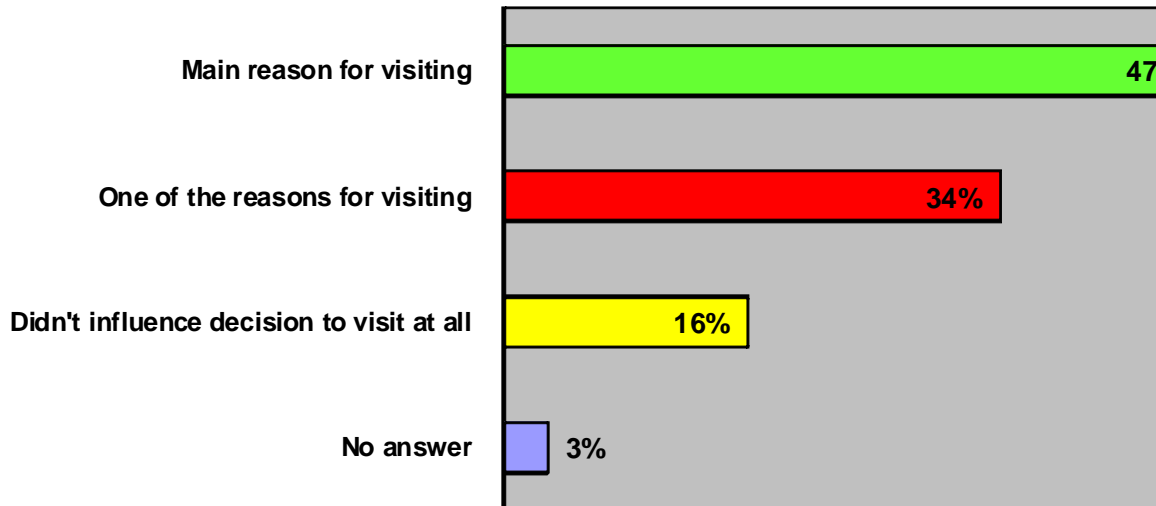
Key Findings

In order to gain a true understanding of the motivations of visitors choosing to visit the reserve, the following section excludes local people. The underlying assumption is that tourists bring money into the region, whereas locals would have spent their money in the area anyway. This makes the estimate of spending attributable to seabirds conservative, as it excludes any spending by any local people who, if not for the reserves, may have left the local area and spent their money elsewhere. 'Tourists' therefore refers to 'non-local' visitors. Of these tourists, those holidaying in the area are referred to as 'holidaymakers', and those making a day-trip to the reserve, either from home or from a holiday destination elsewhere, are referred to as 'day-trippers'.

Reasons for visiting

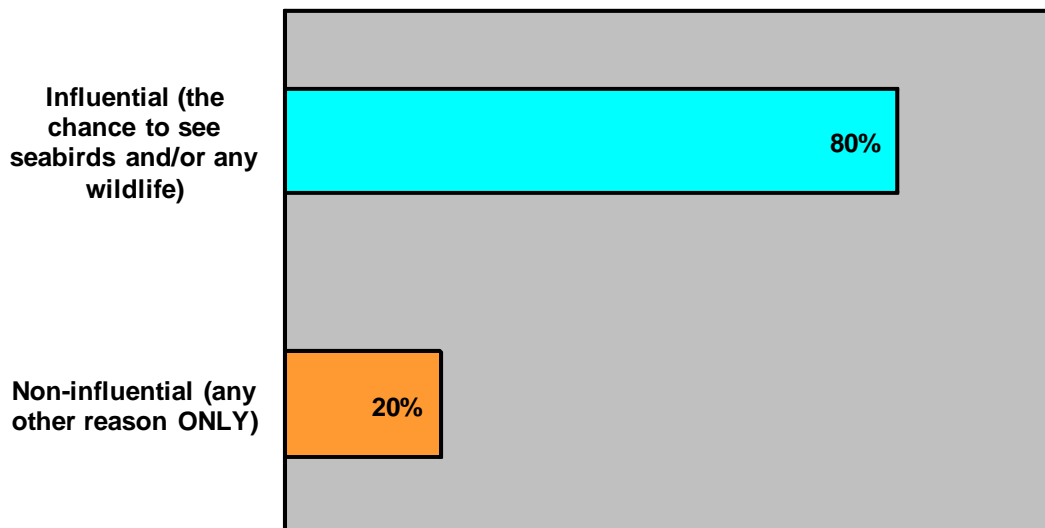
The first step was to determine how important seabirds and sealife were in influencing the decision of visitors to the reserve. We therefore, asked a sample of visitors the following questions.

1. "How important was the chance to watch seabirds in your decision to visit today?" ¹



Note: Actual number of respondents: main reason - 80, one reason - 57, no reason - 28, no answer - 5

2. "Was the chance to see birds or wildlife influential in your decision to visit this area?" ⁴



Note: Actual number of respondents: influential - 133, non-influential - 34

⁴ The quantities given are the number of respondents, i.e. the number of surveys filled out, as opposed to the total number of people once party sizes are taken into account. It must also be noted that not all of the survey's respondents answered all of the relevant questions, and so the numbers may add up to less than the total number of people surveyed.

Almost 50% of respondents cited seeing seabirds as their main reason for visiting the area, whilst an overwhelming 80% said that either seabirds or wildlife were influential in their decision. During 2008, Bempton received some 48,786 visits in total, increasing to 67,490 visits⁵ in 2009. Just over half of these visits were made between May and July; the period in which breeding seabirds are present. There is evidently a clear link between the huge number of tourists that visit the area and the opportunity to see seabirds.

Estimated trip expenditure and spending attributable to seabirds

The next step was to estimate how much an average visitor spends per visit and then how much of that average spend can be attributed to seabirds.

1. *Estimated mean daily expenditure per visit*

	Mean Daily Spend per Day-tripper Party (£)	Mean Daily Spend per Day-tripper (£)	Mean Daily Spend per Holidaymaker Party (£)	Mean Daily Spend per Holidaymaker (£)
Accommodation	0	0	62.95	22.17
Travel fares and petrol	13.13	4.98	14.34	5.05
Meals and drinks	14.67	5.57	30.18	10.63
Gifts and souvenirs	6.33	2.40	11.04	3.89
Entry fees and entertainment	2.82	1.07	4.27	1.50
Other	0.08	0.03	6.53	2.30
TOTAL	33.86	16.46	131.48	46.30

In order to identify the mean spend per person attributable to seabirds, several assumptions were made. Firstly, in answering the question regarding how important seabirds were to a person's visit, 75% of that person's spend was attributed to seabirds when they answered "*it was the main reason*", 25% when they answered "*it was one of the reasons*", and 0% was attributed when they answered "*it didn't influence my decision at all*". Additionally, where figures were given by day-trippers on their accommodation expenses these were not included in the calculation (as it was assumed that, coming from other areas, day-trippers' spend on accommodation would not be beneficial to the local area).

⁵ The 2009 figure for visit numbers is based on actual visit numbers between January-September 2009 (62,622 visits), projected to cover the full year (January-December). Scaling up these 9 month figures for 2009 based on 2008 monthly visitor weightings gave the total 2009 visitor number estimate of 67,490. Monthly visit number proportions are assumed to be the same from year to year; i.e. 92.8% of visits in 2008 happened during the first 9 months, therefore in 2009, 62,622 visits = 92.8%.

2. Expenditure attributable to seabirds in 2008 and January-September 2009

	Mean spend per person (£)	Mean spend per person attributable to seabirds (£)	Total spend attributed to seabirds 2008 (£)	Full-time equivalent (FTE) jobs supported 2008	Total spend attributed to seabirds 2009 (projected) (£)	Full-time equivalent (FTE) jobs supported 2009
Day-tripper	16.46	9.42	199,796.35	5.71	276,396.01	7.90
Holiday maker	46.30	15.10	345,379.94	9.87	477,794.69	13.65
TOTAL	---	---	545,176.29	15.58	754,190.71	21.55

In the above table, total spend attributable to seabirds was converted into the number of jobs that such spend could support, i.e. full-time equivalent (FTE) jobs.

Local economic benefits attributable to seabirds:

In the 2009 projections, an estimated income of over three quarters of a million pounds (over £750,000) coming into the local area was attributable directly to seabirds. This equates to 21.5 FTE jobs being supported by seabirds in the region, or over 5% (i.e. 5.2%) of all employed people in the Bempton Parish Council area⁶. These jobs 'supported by seabirds' are in addition to those staff actually employed at the reserve (4x full-time; 2x part-time; 5x part-time seasonal). Thus making the seabirds at the RSPB's Bempton Cliffs Reserve a significant contributor to the local economy.

By comparison, in 2008, over half a million pounds (nearly £550,000) of income into the local area was attributable to seabirds, equating to over 15 full time jobs.

Insight: Local Business and Bempton Reserve Staff

To support our analysis, we canvassed a number of local businesses and RSPB staff who worked at the Reserve to get their views on the importance of seabirds for their businesses. The following gives an overview of their comments and views.

The comments below, illustrate the close relationship the reserve has with the local community, and the role it plays through the promotion of seabirds in attracting tourists to the region. Many believe that declines in seabird population numbers would result in significant losses in their annual turnover.

⁶ The 2001 Census showed that 417 people were employed in the Bempton Parish County Council area; see <http://www.eastriding.gov.uk/corp-docs/researchgroup/parishprofiles/BEMPTON.pdf>

Accommodation

Stables B&B – Local businesses include the family-run, Stables B&B, a Bed and Breakfast estimating 90% of their turnover to come from tourism, with 70% being linked to seabirds – “70% of our customers are bird watchers”, says owner, Martin Payne. Their target customers are coastal birders, which is why they advertise their business through the RSPB magazine and have a section on both the RSPB and the ‘Birds of Britain’ websites. Mr Payne believes that the RSPB reserve is a good point of contact for members of the public, and that the RSPB’s magazine and website are important in bringing people to the reserve.

Hospitality

Ethical Catering Outdoors – Ethical Catering Outdoors is an ethical foods trailer located on the reserve itself and whose target market is exclusively reserve visitors. The owner, Jeff Wheelwright describes the relationship they have with the reserve as mutually beneficial, providing a business opportunity that would not otherwise be there for them. He states that, “Without the reserve, there would be no business case for our catering trailer”, while the provision of “good, honest home-made food in beautiful surroundings” provides a further incentive for visitors to return to the reserve. Mr Wheelwright says that the business is seasonal and customer numbers depend heavily both on the weather and the volume of seabirds. The large presence of seabirds during the summer months brings the peak customer numbers. When asked whether they would experience a noticeable difference if the seabirds were not there anymore, Mr Wheelwright’s immediate response was simply “absolutely, no question about it”. He went on to state, that the reserve must continue to be promoted, as “it is what gets people up there”, i.e. to Bempton.

Tourism

Richardson & Simpson Cruises, (Yorkshire Belle seabird cruises) –Richardson & Simpson Cruises, is a tour-boat operator, taking cruises along the cliffs to allow people to get closer to the birds. Peter Richardson says that people use the service to get a different perspective of the birds, “not looking down from cliffs, but being there and surrounded by them”. The tours operate almost exclusively for tourists. Furthermore, Mr Richardson estimates that 60% of the service-users join the tours purely to see the seabirds. The company needs no advertising strategy other than informing the reserve staff whenever cruises are being run, illustrating the very close relationship between the company and the RSPB, as well as the business’ deep reliance on seabird-lovers. Richardson & Simpson Cruises employ six members of staff during the high-season period, with an annual turnover of £100,000.

RSPB Staff

“This is the best place to see seabirds in the UK”, says Alan Dalton, Bempton Cliffs Visitor Centre Manager. The reserve successfully attracts non-RSPB members as well as RSPB members; despite the fact that non-members must pay a fee. Alan believes

that there is about a 50:50 split between the two groups. When asked what the effect would be on the regional economy should the seabirds disappear, his short and sure reply was simply “*drastic*”. He cited the recent declines in numbers of puffins as a cause for concern, and believes that businesses reliant on the bird populations, such as local B&Bs, the *Yorkshire Belle* boat tour and neighbouring reserves, would all suffer hugely should seabird numbers dwindle further.

2.2 South Stack Cliffs RSPB Nature Reserve

Introduction

“Dramatic”, “unusual” and “outside of most people’s general experience” are just some of the phrases used by reserve staff to describe the RSPB’s South Stack Nature Reserve. More than 4,000 seabirds breed on the cliffs, including guillemots, puffins and razorbills, while in the Autumn passing Manx shearwaters can be seen. Visitors can watch them all using binoculars and telescopes or *via* live TV pictures at Ellin’s Tower visitor centre. From the reserve, visitors can climb down the 400 steps to access South Stack Island and the Lighthouse (owned by the Isle of Anglesey County Council who charge an admission fee). The area also supports up to 12 breeding pairs of chough, with up to 40 birds wintering.

The reserve employs six members of staff through the course of the year, and there is a tea shop. Local businesses have been used for substantial contracts, such as refurbishing the visitor’s centre in 2007. Welsh companies were used to install solar panels on the roof, create an artificial model of the cliffs, and provide rope-work for CCTV-related installation. A local artist was also hired to illustrate the information on the information boards, which further demonstrates the reserve’s local cultural links.

The following case-study seeks to demonstrate the role that seabirds play in contributing to the local economy and tourist trade.

Visitor Survey

Visitor surveys were carried out between April and September 2009. In total, 175 questionnaires were completed, and when the members of their party were included, respondents had provided answers on behalf of 534 visitors.

Details of methodology, sample sizes, visitor activities and expenditure, length of stay, etc. can be found in the full length methodology in chapter 3.

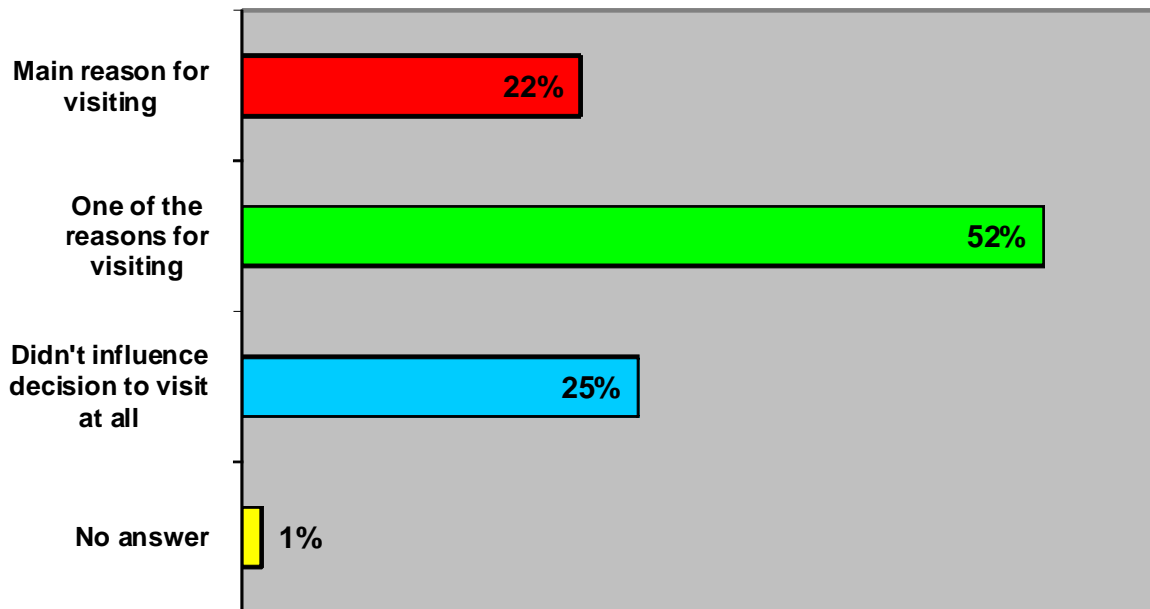
Key Findings

The following section excludes local people that visited the reserve in order to gain a true understanding of the motivations of non-local tourists choosing to visit. The underlying assumption is that tourists bring money into the region, while locals would have spent their money in the region irrespective of the presence of the reserve. However, it does mean that the estimate of spending attributable to seabirds is a conservative one, as it excludes any spending by any local people who, if not for the reserves, may have left the local area and spent their money at another seabird location. ‘Tourists’ therefore refers to ‘non-local’ visitors. Of these tourists, those holidaying in the area are referred to as ‘holidaymakers’, and those making a day-trip to the reserve, either from home or from a holiday destination elsewhere, are referred to as ‘day-trippers’.

Reasons for visiting

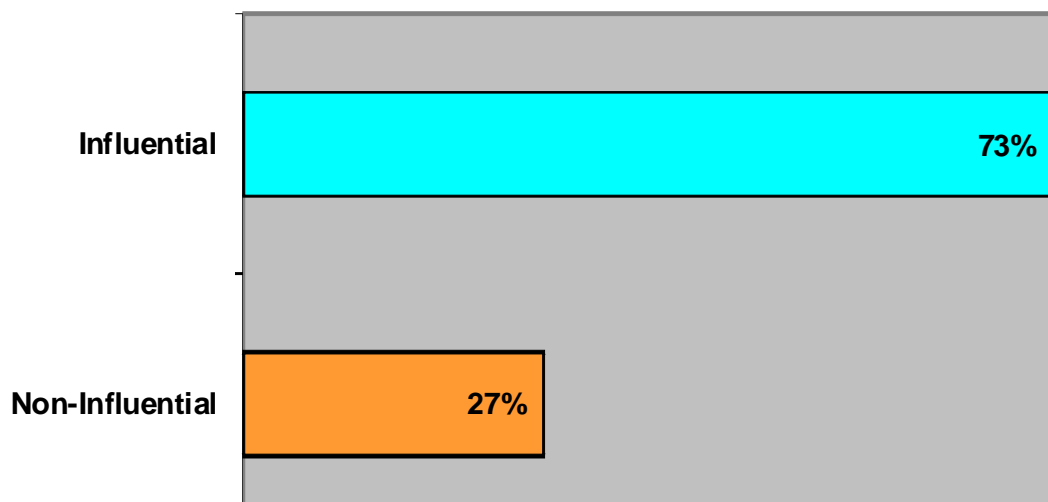
The first step was to determine how important seabirds and sealife were in influencing the decision to visit the reserve. Therefore, we asked the following questions.

1. *“How important was the chance to watch seabirds in your decision to visit today?”*¹



Note: Actual number of respondents: main reason - 35, one reason - 83, no reason - 41, no answer - 2

2. *“Was the chance to see birds or wildlife influential in your decision to visit this area?”*⁷



Note: Actual number of respondents: influential - 116, non-influential - 43

⁷ Note: The quantities given are the number of respondents, or the number of surveys received, as opposed to the total number of people once party sizes are taken into account. It must also be noted that not all of the survey's respondents answered all of the relevant questions, and so the numbers may add up to less than the total number of people surveyed.

Over 70% of respondents cited seeing seabirds as their main reason or one of the reasons for visiting the area, whilst 73% said that birds or wildlife were influential in their decision. South Stack Cliffs Reserve has a visitor's centre at Ellin's Tower, and there is a further observation post at the Lighthouse. In 2009, between Easter (April 2009) and the end of September when the visitor centre at Ellin's Tower is open, South Stack Cliffs received some 43,862 visits in total, a figure gained from counts at the visitor centre and the Lighthouse. During 2008, counts were made at the Lighthouse only, and 24,082 visits were recorded between March and September. The vast majority of these visits were made between May and August; the period in which breeding seabirds are present. This provides evidence of a clear link between the number of tourists that visit the area and the opportunity to see seabirds.

Estimated trip expenditure and spending attributable to seabirds

The next step was to estimate how much an average visitor spends per visit and then how much of that spend can be attributed to seabirds.

1. *Estimated mean daily trip expenditure*

	Mean Daily Spend per Day-tripper Party (£)	Mean Daily Spend per Day-tripper (£)	Mean Daily Spend per Holidaymaker Party (£)	Mean Daily Spend per Holidaymaker (£)
Accommodation	0	0	25.32	6.90
Travel fares and petrol	11.20	3.64	13.87	3.78
Meals and drinks	18.17	5.90	18.21	4.96
Gifts and souvenirs	4.34	1.41	5.16	1.41
Entry fees and entertainment	5.01	1.63	3.33	0.91
Other	3.06	0.99	0.24	0.07
TOTAL	42.89	16.91	67.00	18.26

In order to identify the mean spend per person which is attributable to seabirds, several assumptions were made. Firstly, in response to the question regarding how important seabirds were to an individual's visit, when they answered "*it was the main reason*", 75% of that individual's spend was attributed to seabirds; 25% when they answered "*it was one of the reasons*"; and 0% was attributed when they answered "*it didn't influence my decision at all*". Additionally, where figures were given by day-trippers on their accommodation expenses, these were not included in the calculation (as the assumption was that, coming from another area, day-trippers' spend on accommodation would not bring benefits to the local area).

2. Expenditure attributable to seabirds, and jobs supported, in 2008 and 2009

	Mean spend per person (£)	Mean spend per person attributable to seabirds (£)	Total spend attributed to seabirds 2008 (£)	Full-time equivalent (FTE) jobs supported 2008	Total spend attributed to seabirds 2009 (£)	Full-time equivalent (FTE) jobs supported 2009
Day-tripper	16.91	5.22	46,402.84	1.33	84,516.29	2.42
Holiday maker	18.26	5.22	75,935.63	2.17	138,306.14	3.95
TOTAL			122,338.47	3.5	222,822.43	6.37

In the above table, total spend attributable to seabirds was converted into the number of jobs that such spend could support, i.e. full-time equivalent (FTE) jobs.

Local economic benefits attributable to seabirds:

In 2009, an estimated income into the local area of almost quarter of a million pounds (approximately £223,000) was attributable directly to seabirds. This equates to over 6 FTE jobs being supported by seabirds in the region in addition to the 6 staff directly employed at the Reserve. Six FTE jobs is approximately 0.7% of all employed people in the Trearddur Ward, Isle of Anglesey⁸, or approximately 0.3% of all finance and business activity-based employment in the entire Island of Anglesey local authority area⁹.

By comparison, in 2008, just over £120,000 of income into the local area was attributable to seabirds, equating to 3.5 full time jobs. It must be noted, however, that visitor numbers in 2008 do not include those that went to the visitor's centre on the reserve as visitor numbers were only being recorded at the observation post at the Lighthouse and not all visitors would or could have made the climb down to the Lighthouse.

Furthermore, staff at the South Stack Cliffs Reserve ran a car-count study in 2004. 180,000 visits were paid to the Reserve; this is compared with visitor centre visits of approximately 30,000 a year. Therefore, there are lots of visits throughout the year that are not recorded at the visitor centre.

⁸ The 2001 Census shows that 918 people were in employment in the Trearddur Ward area.

<https://www.nomisweb.co.uk/reports/lmp/ward/1308630854/report.aspx>

⁹ Total workplace employment in the Isle of Anglesey local authority area, for finance and business activities, was 2,000 during 2007. See *Statistical Bulletin (30th July 2009)*, National Statistics, available at: <http://wales.gov.uk/docs/statistics/2009/090730sb452009en.pdf?lang=en>

Insight: Local Business and South Stack Cliffs Reserve Staff

To support our analysis, we canvassed a number of local businesses and RSPB staff who worked at the Reserve to get their views on the importance of seabirds for their businesses. The following gives an overview of their comments and views.

The sentiment that seabirds are an intrinsic part to the overall interest of the site is echoed throughout those businesses and Reserve staff interviewed. There is a very strong consensus that to lose the seabirds would detract from the appeal of the whole area, and thus give tourists one less reason to visit.

Accommodation

Ingledene B&B – According to Shirley Murphy, owner of Ingledene B&B, many people who come to the area in summer do so in order to see the puffins. She cites one such regular group of users from Cheshire that come annually to see the seabirds and stay at her B&B. In fact, on their website the business advertises South Stack Cliffs Reserve as a main attraction. During the high season, she is fully booked.

Blackthorn Farm B&B, campsite and caravan park – Richard Tuke, owner of Blackthorn Farm, which is a B&B, campsite and caravan park, reiterates the importance of the puffins in attracting the number of people that use his business over the summer months. His reliance on bird lovers is apparent in his use of the RSPB magazine as a source of advertising. Indeed, he states that one of the main conversations over the breakfast table at the B&B is in relation to birds – “*what have you seen at South Stack?*”. The company is relatively young at two years, yet the growing number of tourists that they are experiencing means Mr Tuke is already looking to employ an additional part-time worker.

Tourism

South Stack Island & the Lighthouse – Pat West, of the Isle of Anglesey County Council, says that the people who pay to visit South Stack’s council-owned Lighthouse are mostly tourists. The Lighthouse received 18,428 visitors between Easter and the end of September this year, or just less than half of the number of people that came to visit the RSPB’s Ellin’s Tower visitor centre, each paying an entrance fee of £4 for adults and £2 for children. The Lighthouse also employs six members of staff during the high season.

According to Mr West, “*there are lots of things that pull someone to South Stack; seabirds are one part of a bigger whole.*” The RSPB reserve has a strong relationship with the County Council, with Lighthouse employees often recommending visitors to use the reserve, and *vice versa*. It serves to define the close links and mutual benefits between the reserve and the rest of the community.

RSPB Staff

Dave Bateson, the Site Manager at South Stack Cliffs, believes that most people who come are day visitors and caravan users from North West England. Sadly, though razorbills and guillemots are doing well, Dave highlighted that puffins have been declining. The problem is that as puffins play such a strong flagship role in attracting visitors to the area, their decline will have large implications for the future of the region's tourism and those that rely on it.

Alastair Moralee, RSPB Area Manager believes that local hospitality businesses such as B&Bs, definitely benefit from the tourist trade generated by the Reserve. Seabirds are an intrinsic part of the overall interest of the site and Alastair admits that the loss of the seabirds *"absolutely would have an impact on a large number of people"*.

2.3 Mull of Galloway RSPB Nature Reserve

Introduction

The RSPB's Mull of Galloway Reserve sits on Scotland's most southerly point, its sheer sea cliffs being home to thousands of birds including kittiwakes, puffins, razorbills, guillemots and black guillemots. Gannets are common, with some 2,000 pairs nesting on Scare Rocks nearby. There are stunning views to the west of the Solway Firth, the Irish Sea and the Isle of Man. There is a lighthouse, complete with a museum, and a privately owned café on the reserve to accommodate tourists.

The reserve employs 2 members of staff, 1 full-time and 1 part-time, and is open all year round. The visitor facilities are open from Easter to the end of October, and are leased from a local charity; the South Rhins Community Development Trust (SRCDT). All donations made at the centre go straight to the SRCDT rather than the RSPB and as such contribute to the funding of local community development.

Local contractors are used for odd jobs within the reserve, for example, local electricians are used for general upkeep. However, there is a lack of local expertise to deal with more specialised jobs – workers from Glasgow are used to service the bird cameras annually.

The following case-study seeks to demonstrate the contribution that seabirds make to the local economy and tourist trade.

Visitor Survey

Visitor surveys were carried out between April and September 2009. In total, 208 questionnaires were completed. Once the members of each party were included, survey respondents responded on behalf of 557 visitors in total.

Full details of the methodology, sample sizes, visitor activities and expenditure, length of stay, etc, can be found in the full length methodology in chapter 3.

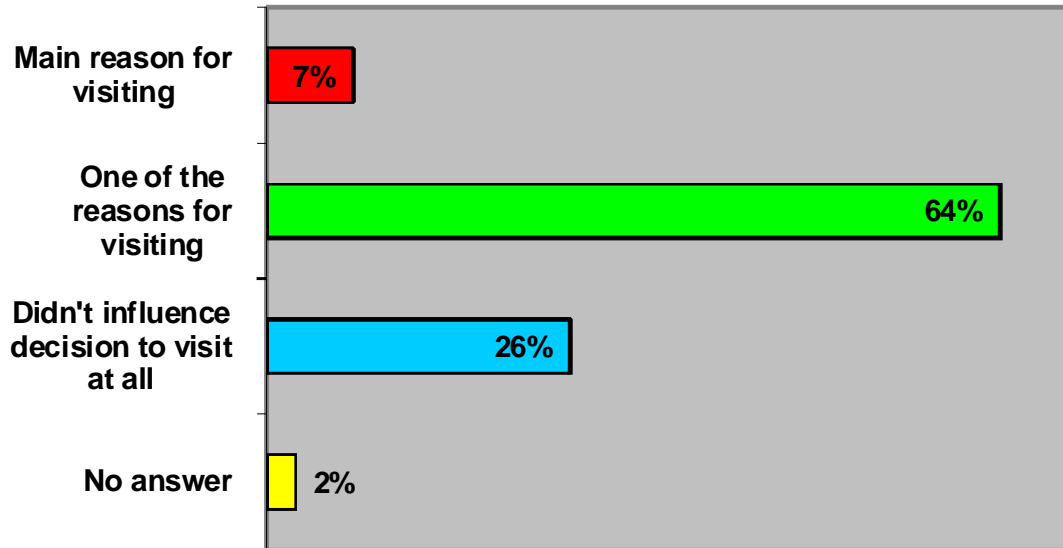
Key Findings

In order to gain a true understanding of the motivations of tourists choosing to visit the reserve, the following case-study excludes local visitors. This is based on the underlying assumption that while tourists bring money into the region, locals would have spent theirs there even if there was no reserve. Furthermore, this makes the estimate of spending attributable to seabirds a conservative one, as it excludes any spending by any local people who, if not for the reserve, may have left the local area and spent their money elsewhere. 'Tourists' therefore refers to 'non-local' visitors. Of these tourists, those holidaying in the area are referred to as 'holidaymakers', and those making a day-trip to the reserve, either from home or from a holiday destination elsewhere, are referred to as 'day-trippers'.

Reasons for visiting

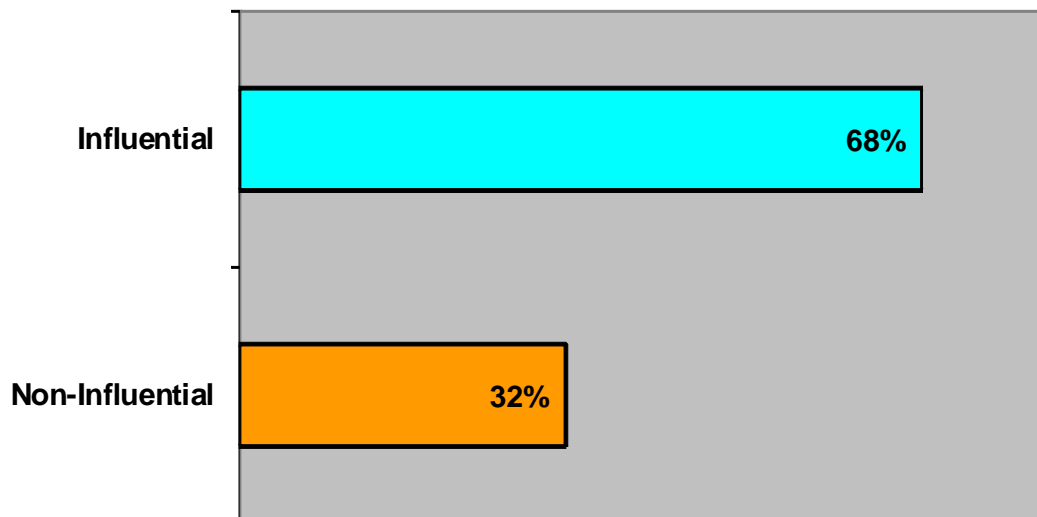
The first step was to determine how important seabirds and sealife were in influencing the decision to visit the reserve. Therefore, we asked the following questions.

1. "How important was the chance to watch seabirds in your decision to visit today?" ¹



Note: Actual number of respondents: main reason - 15, one reason - 128, no reason - 53, no answer - 5

2. "Was the chance to see birds or wildlife influential in your decision to visit this area?" ¹⁰



Note: Actual number of respondents: influential - 134, non-influential - 64

¹⁰ The quantities given are the number of respondents, or the number of surveys received, as opposed to the total number of people once party sizes are taken into account. It must also be noted that not all of the survey's respondents answered all of the relevant questions, and so the numbers may add up to less than the total number of people surveyed.

Over 70% of respondents cited seeing seabirds as either their main reason or one of the reasons for visiting the area, whilst more than two thirds said that birds or wildlife were influential in their decision. Between Easter and the end of October, when the visitors centre is open, the Mull of Galloway Reserve received some 19,000 visits in 2009, and 20,980 in 2008. The busiest period was between May and July; the period in which seabirds are present, rearing their chicks. There is evidently a clear link between the tourists that visit the area and the opportunity to see seabirds.

Estimated trip expenditure and spending attributable to seabirds

The next step was to estimate how much an average visitor spends per visit and then how much of that spend can be attributed to seabirds.

1. *Estimated mean daily trip expenditure*

	Mean Daily Spend per Day-tripper Party (£)	Mean Daily Spend per Day-tripper (£)	Mean Daily Spend per Holidaymaker Party (£)	Mean Daily Spend per Holidaymaker (£)
Accommodation	0	0	48.73	17.59
Travel fares and petrol	7.95	2.94	10.03	3.62
Meals and drinks	18.54	6.84	28.27	10.21
Gifts and souvenirs	4.08	1.51	4.15	1.50
Entry fees and entertainment	3.98	1.47	3.19	1.15
Other	0.00	0.00	0.00	0.00
TOTAL	35.50	14.25	94.37	34.07

In order to identify the mean spend per person attributable to seabirds, several assumptions were made. Firstly, in answering the question regarding how important seabirds were to a person's visit, 75% of a person's spend was attributed to seabirds when they answered "*it was the main reason*", 25% when they answered "*it was one of the reasons*", and 0% was attributed when they answered "*it didn't influence my decision at all*". In addition, where day-trippers gave figures for accommodation expenses, these were not included in the calculation, as it was assumed that as they had come from outside the area, day-trippers' spend on accommodation would not bring benefits to the local area.

2. Expenditure attributable to seabirds, and jobs supported, in 2008 and January-September 2009

	Mean spend per person (£)	Mean spend per person attributable to seabirds (£)	Total spend attributed to seabirds 2008 (£)	Full-time equivalent (FTE) jobs supported 2008	Total spend attributed to seabirds 2009 (projected) (£)	Full-time equivalent (FTE) jobs supported 2009
Day-tripper	14.25	3.17	18,144.33	0.52	16,431.95	0.47
Holiday maker	34.07	7.49	108,672.83	3.10	98,416.77	2.81
TOTAL			126,817.16	3.62	114,848.72	3.28

In the above table, total spend attributable to seabirds was converted into the number of jobs that such spend could support, i.e. full-time equivalent (FTE) jobs.

Local economic benefits attributable to seabirds:

In 2008, an income into the local area of over £126,000 was attributable directly to seabirds. This equates to nearly 4 (i.e. 3.62) full time jobs being supported in the region. It was a very similar picture in 2009, when nearly £115,000 of income into the local area was attributable to seabirds, or over 3 full time jobs in addition to the staff employed at the Reserve. The 2001 Census shows that 1282 people were in employment in the Rhins South Ward area¹¹. Thus seabird-related spending accounted for nearly 0.3% of the local workforce in both 2008 and 2009 (0.28% and 0.26% respectively).

Insight: Local Business and Mull of Galloway Reserve Staff

To support our analysis, we canvassed a number of local businesses and RSPB staff who worked at the Reserve to get their views on the importance of seabirds for their businesses. The following gives an overview of their comments and views.

One common response from many of the interviewees was with respect to the role that seabirds played to the whole appeal of the area. To lose the seabirds was, in the eyes of each business interviewed, to detract from the inherent sense of wellbeing offered by the reserve. Several interviewees also referred to the “*mutual relationship*” held by the reserve and their business; It is this ‘placement within the whole’ where

¹¹ The 2001 Census shows that 1282 people were in employment in the Rhins South Ward area. <https://www.nomisweb.co.uk/reports/lmp/ward/1308631924/report.aspx?pc=DG9%209NX>

seabirds have their relevance; necessary to the entire appeal of the area's beauty, and fundamental to the area's tourist trade.

However, seabirds play a much more important role than simply allowing the local tourist industry to grow; they also play a big part in diversifying the economic activity of the area and thus contributing to its economic resilience. Dumfries and Galloway suffered hugely under the 2001 'Foot and Mouth' outbreak and as a result, great effort was placed into the economic diversification of the area in order to create future resilience to such shocks.

Accommodation

New England Bay Caravan Club – Much of the local economy depends on tourists. Jennifer Hagerty, of the New England Bay Caravan Club, states that when the park is full to capacity, the number of tourists can be higher than the surrounding local population! And there is a good relationship with the Reserve; according to Ms Hagerty, "*The majority of our visitors go to the RSPB reserve*". The company hosts regular talks by RSPB reserve staff and advertises RSPB activities in their monthly Club magazine.

Hospitality

Gallie Craig Coffee House – The Gallie Craig Coffee House is one business venture resulting from the post-'Foot and Mouth' move to diversify in the region, receiving money from the Scottish Executive funded 'Making Tracks' scheme. The café boasts a number of awards for the eco-design of the building (including a turf roof with which the slope of the hillside extends into). Visitors to the Reserve created an opportunity that the café has been able to meet, while in turn, they believe that the café has helped in doubling numbers to the area. Angela Sloan, one of the owners, believes that 90% of their customers are tourists and all Gallie Craig advertising features the lighthouse and the Reserve. The innovative enterprise, and the birds that it relies on for its tourist trade, contribute hugely to the area's diversification from farming and the future economic stability of the region.

Tourism

Logan Botanical Gardens – Richard Baines of Logan Botanical Gardens estimates 70% of their customers to be tourists, many of which are drawn by advertisements placed at the RSPB visitor centre, clearly demonstrating the mutual benefits between the reserve and the rest of the community. On the interdependent relationship between the Botanical Gardens and the Reserve, Mr Baines stated that in relation to the numbers visiting the Gardens, "*Three years ago, there was nothing like the joint initiatives of today. The reserve definitely makes a difference*". He went on to outline that having a number of attractions in the area to draw tourists was particularly important as there was little or no passing traffic.

RSPB Staff

The Reserve Manager at the Mull of Galloway Reserve, Gus Keys, believes that the loss of seabirds would have a *"huge, huge impact"* on the number of tourists visiting the area. He cites one clear example; the Gallie Craig Coffee House is just a stone's throw away from the Reserve's visitor centre, complete loss of seabirds would *"half the numbers [of customers], easily"*. Indeed, the RSPB visitor's centre attracts approximately 20,000 visitors a year, and the café receives some 36,000 customers annually. According to Gus, *"We all compliment each other ... Without all 3 of us [the Reserve, the café, and the Reserve's lighthouse] there wouldn't be the people, the numbers, and the turnover."* Gus went on to state, with respect to the opening of the renovated Visitor Centre (late 1990's) and the café (2005) that *"visitor numbers have doubled"*.

2.4 Rathlin Island RSPB Nature Reserve

Introduction

With just over 80 inhabitants¹², Rathlin Island is Northern Ireland's only inhabited island. And at only 7 square miles in size, its diminutive size belies its untamed and rare beauty. At the height of the breeding season, Rathlin is home to Northern Ireland's largest seabird colony. A visitor to the West Lighthouse viewpoint can expect a truly unique experience, surrounded by an amphitheatre of incredible noise and birdlife. At the new RSPB Seabird Centre, visitors get close up views of Northern Ireland's biggest seabird colony where thousands of fulmars, puffins, razorbills, guillemots, kittiwakes gannets and shags congregate to breed from May to July.

The Reserve is a main employer on the Island, employing two full time and three seasonal (2 full-time and 1 part-time) members of staff. In 2009, over 3,000 hours of voluntary work had been clocked up by October. In addition to direct employment of staff at the Reserve and contributing to the Island's tourism, the RSPB also leases farmland, bought from non-local people, to local farmers, thus further contributing to local economic development.

The following case-study seeks to demonstrate the contribution that seabirds make to the Island's economy and tourism industry.

Visitor Survey

In 2008 and 2009, visitor surveys were carried out between the months of April and September. In total, 544 questionnaires were completed and when the members of the survey respondents' party were included, it was calculated that they had responded on behalf of 2,315 visitors.

Full details of the methodology, sample sizes, visitor activities and expenditure, length of stay, etc, can be found in the methodology section in chapter 3.

Key Findings

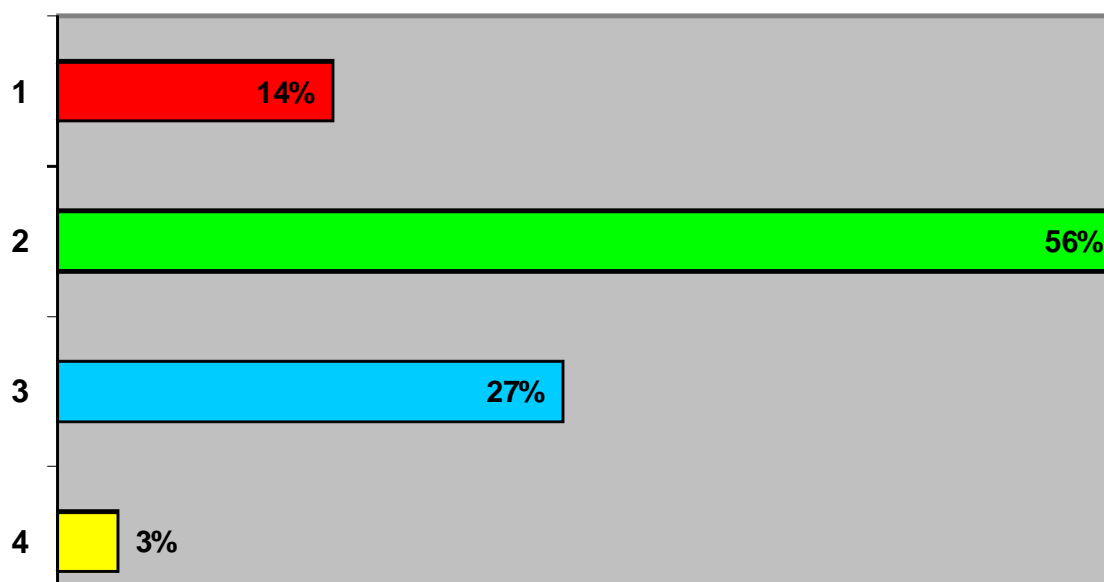
The following section excludes local people that visited the reserve in order to gain a true understanding of the motivations of tourists choosing to visit. The underlying assumption is that tourists bring money into the region, while locals would spend their money there irrespective of whether the Reserve existed. Moreover, this makes the spending attributable to seabirds a conservative estimate, as it excludes any spending by any local people who may have left the local area and spent their money at another reserve elsewhere. 'Tourists' therefore refers to 'non-local visitors', either holidaymakers or day-trippers, those making a day-trip from outside the area.

¹² Moyle District Council – Rathlin Island information, <http://www.moyle-council.org/attractions/?id=24>

Reasons for visiting

The first step was to determine how important seabirds and sealife were in influencing the decision to visit the reserve. Therefore, we asked the following question.

Question: “Which of the following statements best describes your interests in birds, nature and the outdoors?”¹³



Key:

1 = While I am interested in wildlife and nature as a whole, my main interest is definitely in birds (73 responses)

2 = While I am interested in birds, my main interest is in wildlife and nature as a whole (282 responses)

3 = I don't have a particular interest in wildlife and nature but enjoy walking and/or other outdoor pursuits (134 responses)

4 = I don't have a particular interest in any of these areas (16 responses)

Over 70% of respondents cited their main interests as birds and wildlife. In 2009, between April and mid September when the Seabird Centre is open, the Reserve received some 14,479 visits in total, and over the same period in 2008, there were 11,708 visits. The vast majority of these visits were made between May and August; the period in which the breeding seabirds are present on the Island. There is evidently a clear link between the large number of tourists that visit the area and the opportunity to see seabirds.

¹³ The quantities given are the number of respondents, or the number of surveys received, as opposed to the total number of people once party sizes are taken into account. It must also be noted that not all of the survey's respondents answered all of the relevant questions, and so the numbers may add up to less than the total number of people surveyed.

Estimated trip expenditure and spending attributable to seabirds

The next step was to estimate the mean spend per person attributable to seabirds and to do that, several assumptions were made. Full details regarding these assumptions and how they were calculated can be found in the methodology section.

Firstly, in answering the question regarding how important birds and wildlife were in influencing a person's visit, when they answered "*birds were the main reason*", 75% of that individual's spend was attributed to seabirds; 25% when they answered "*I am interested in wildlife and nature as a whole*"; 10% when they answered "*I am interested in walking and/or outdoor pursuits*"; and 0% was attributed when they answered "*I have no particular interest in these areas*".

The average spend per person figure was gained from a joint survey carried out on Rathlin Island in August 2000 by the RSPB and The National Trust¹⁴. After taking account of UK Government Gross Domestic Product Deflators, the average spend was estimated to be £11.58 per person in 2009. This figure does not however include ferry and accommodation costs. Ferry costs were thus added into the calculations¹⁵, and a mean accommodation cost per day was included in the calculation for holidaymakers by gaining the average accommodation costs at the three other RSPB marine reserves¹⁶ included in this report.

Expenditure attributable to seabirds, and jobs supported, in 2008 and 2009

	Mean spend per person (£)	Mean spend per person attributable to seabirds (£)	Total spend attributed to seabirds 2008 (£)	Full-time equivalent (FTE) jobs supported 2008	Total spend attributed to seabirds 2009 (£)	Full-time equivalent (FTE) jobs supported 2009
Day-tripper	20.44	5.55	44,229.99	1.26	54,698.16	1.56
Holiday maker	58.79	16.53	49,270.05	1.41	60,931.08	1.74
TOTAL			93,500.04	2.67	115,629.24	3.3

In the above table, total expenditure attributable to seabirds was converted into the number of jobs that such spend could support, i.e. full-time equivalent (FTE) jobs.

¹⁴ Rayment, M & Dickie, I (2001) *Conservation Works ... for local economies in the UK*. The RSPB, Sandy, UK. http://www.rspb.org.uk/Images/conservationworks_tcm9-132933.pdf

¹⁵ Based on the 2009 Rathlin Island Ferry Ltd fares, the average 2009 return fare was estimated to cost £8.86 for day trippers and £1.55 per day for holidaymakers, once the portion of adult and child fares was factored into the calculation.

¹⁶ Bempton Cliffs, Mull of Galloway, and South Stack Cliffs Reserves.

Local economic benefits attributable to seabirds:

In 2009, an income into the local area of over £115,000 was attributable directly to seabirds. This equates to over 3 (i.e. 3.3) full-time jobs being supported by expenditure on seabirds in the region, in addition to the full-time and seasonal staff employed at the Reserve. In 2007, 458 people in the Bonamargy and Rathlin Ward (an area covering the Island and part of the mainland) were employed full-time¹⁷, meaning annual spend by visitors to Rathlin in 2009 accounted for about 0.7% of full-time employment in the region. However, with a total population of approximately 80 people, of whom not all are of working age or in employment, seabird attributable expenditure supports over 4% (i.e. 4.1%) of the Rathlin Island population.

In 2008, over £90,000 of income into the local area, equating to nearly 3 full-time jobs, was attributable to seabirds.

Visitor numbers to the Reserve have increased annually since it opened in 1978, growing from 5,000 to 14,500 in the last ten years alone. The joint RSPB-National Trust survey in 2000 (Rayment & Dickie, 2001) estimated that 20-25% of all visitors to Rathlin Island visited the RSPB reserve. This number is growing as the number of visits recorded at the Seabird Centre between April and September 2009 was approximately 42% of all the passengers (local and tourists) using the ferry service during the same period¹⁸.

Insight: Local Business and Bempton Reserve Staff

To support our analysis, we canvassed a number of local businesses and RSPB staff who worked at the Reserve to get their views on the importance of seabirds for their businesses. The following gives an overview of their comments and views.

Rathlin Island shares a unique cultural history with its seabirds. Even into the twentieth century, seabird eggs were an important part of the economy and diet of island dwellers. They provided seasonal fresh food and were added to preserved foodstuffs for the winter. They were also traded with people on the mainland and as such provided a vital source of income. Today, the dependence on seabirds continues on Rathlin, yet now the form is not food or trade, but tourism.

¹⁷ See Northern Ireland Neighbourhood Information Service (NINIS): In 2007, the Bonamargy and Rathlin Ward had 832 employees of which 458 were employed full-time and 374 part-time.
http://www.ninis.nisra.gov.uk/mapxtreme/viewdata/Labour_Market/Census_of_Employment/Employee_Jobs/Employee_Jobs_2007.xls

¹⁸ Based on passenger numbers for both of the Rathlin Island Ferry Ltd ferries: Total = 34,119 April-September (inclusive) 2009. RSPB visitor numbers (April-mid-September) = 14,479.

Accommodation

Manor House, a guesthouse, restaurant, and bar – Ksenia Zywczuk one of the owners of the Manor House believes that puffins are very important in attracting visitors to the island. The business is family run, and the guesthouse is at full capacity on an almost constant basis over summer, when thirteen full time staff are employed. As time goes on, visitor numbers are growing, and according to Ms Zywczuk, this presents more opportunities for her guesthouse. However, she is clear that, *“If we didn’t get people over, we wouldn’t have a business”*. Despite the other attractions of the Island such as its inherent beauty, walking and cycling, Ms Zywczuk considers seabirds to be the number one attraction.

Coolnagrock B&B – The Coolnagrock B&B is another of the Island’s guesthouses that enjoys a full house during the high season. The owner, Margaret McQuilkin, indicates just how strong the cultural link is between the seabirds and the islanders, she says that the loss of seabirds would be *“disastrous... it would be awful because of our general affinity for the birds; they are part of our culture, our life”*. She further asserts that while visitors come to the Island for the *“whole package”*, boats, seals, seabirds, festivals, the Reserve is *“a big asset”* in bringing visitors to the island.

Transport

The Rathlin Bus Company – The deep-rooted reliance on seabirds is shared by Dennis McMichael of the Rathlin Bus Company, which transports people to and from the harbour to various locations on the Island. The buses operate between Easter and the end of September to coincide with the peak season, operating off the Island on the mainland during the rest of the year. Mr McMichael estimates that 80-85% of the customers that use his service do so in order to see the seabirds, with the bus being constantly full during the peak season; *“Everyone’s talking about the reserve when they come back”*.

Rathlin Island Ferry Ltd – Mary O’Driscoll, of Rathlin Island Ferry Ltd, says that the company primarily serves islanders throughout the year, but are reliant on the tourist trade over summer in order to survive. They employ thirteen full time staff members and one part timer. Ms O’Driscoll believes that the majority of visitors to the Island are not serious birdwatchers, but come chiefly to see the puffins. This underlies the flagship status of this seabird and the true importance of its preservation with regard to the economic health of the island. In her own words, *“a lot of people who come here haven’t got a clue about birds; if the puffins went, people would say there is nothing to see”*. She estimates that without the RSPB reserve, some 30% of the tourists using her service would not come; *“It’s a fantastic advantage to the island, no doubt about it”*, according to Ms O’Driscoll.

RSPB Staff

Gregory Woulahan, RSPB Northern Ireland Reserves Manager, believes that a trip to Rathlin Island is a unique experience, and that visitors will be able to get close to

seabirds in a way that can't be recreated elsewhere in Northern Ireland. There have been several negative fluctuations in seabird breeding success in recent years, particularly affecting guillemots and kittiwakes. However, the majority of people come to see puffins. Gregory is sure that if the Island lost the seabirds, especially the puffins, the Reserve would not continue to exist, as tourist numbers would decrease. He went on to state that if the reserve did not exist, alternative employment for the locals working at the Reserve was unlikely to be available elsewhere on the Island.

3. METHODOLOGY

Purpose

The purpose of this report is to support more accurate estimates of spending by visitors to RSPB coastal reserves and how much of that spend is attributable to seabirds. Furthermore, it is necessary to denote how much of this spend actually benefits the local economy. It is hoped that the data will serve as a suitable proxy for the marine environment insofar as that the local economic benefits that can be attributed to the seabirds and sealife associated with an RSPB reserve will facilitate a better understanding of the economic advantages of conserving the marine environment under the Marine & Coastal Access Act 2009, and in particular, designating Marine Protected Areas (MPAs) for seabirds.

Seabirds spend most of their lives at sea and depend on it for food. However, there is little or no data on the economic benefits of designating MPAs, whether for seabirds or other sealife. Therefore, the potential benefits that a seabird breeding colony brings to a local economy, through tourism, etc, is a useful comparison for the benefits provided through the protection of the areas offshore that seabird use and depend upon. Turning the argument around, what, if any, would be the economic losses to a particular locality if the seabirds stopped thriving.

In total, four reserves were studied:

- Bempton Cliffs,
- South Stack,
- Mull of Galloway and
- Rathlin Island.

It should be remembered that the results produced from this work are estimates, based on surveys measuring a sample of the population and using the assumptions outlined in this methodological report.

Data

The data used in the study can be categorised broadly as quantitative data derived from people-engagement surveys and qualitative data from semi-structured interviews.

The quantitative data was used to calculate the amount of visitor spending attracted to the local area because of seabirds and sealife. The people-engagement surveys from which the data was derived were carried out between April and September 2009, with the exception of Rathlin. However, due to an administrative mix-up at Rathlin, a version of the questionnaire from the previous year was used. As such, the sample size for Rathlin is bigger as it made use of data from April-September 2008 and 2009. However, vital questions which determined the economic estimations were not present in this version, and so a separate economic calculation had to be carried out for that reserve, using a greater number of assumptions.

Total spend by visitors was calculated in two parts, to represent:

1. The total spending of visitors to sites on the day of their visit
2. The proportion of that spending that was attracted to the local area by the presence of seabirds and sealife (additional spend)

For each spending calculation it was essential to distinguish between:

1. Day-trip visitors (locals and non-locals),
2. Holidaymakers

All the calculations are based on 2009 prices.

Semi-structured telephone interviews were carried out with RSPB reserve staff at each of the four locations, as well as with local businesses within the region of each reserve.

1. Calculating Total Visitor Spending

i. Day-trippers:

It was important to distinguish between day-tripper and holidaymaker visits. The results of people-engagement surveys that have produced specific day-visit information are shown in Table 1. There is a view that a relationship may exist between the proportion of day-trip visitors and the level of tourism activity in an area.¹⁹

Table 1: Number of day-trippers, as defined by those ticking options 1, 2 or 4 of Question 10²⁰ on the questionnaire (or Question 12 of the Rathlin questionnaire)

Site	Number of day trippers
Bempton Cliffs	261
Mull of Galloway	172
South Stack	212
Rathlin	1707

¹⁹ Specifically, it is suggested that areas with higher tourism activity may attract more holidaymakers to the area, and hence to a reserve, and consequently, relatively fewer day-trip visitors. However, it is also likely that a higher proportion of the holidaymakers will only have decided to visit the reserve once in the area (i.e. while passing), rather than being specifically attracted to the area by the site.

²⁰ See Appendix I for a full copy of Q10.

ii. Holidaymakers:

The number of holidaymaker visits could also be calculated as a result of the people engagement surveys. Information from the four reserves on holidaymaker-visits is shown in Table 2.

Table 2: Number of holidaymakers, as defined by those ticking option 3 of Question 10 on the questionnaire (or Question 12 of the Rathlin questionnaire)

Site	Number of holidaymakers
Bempton Cliffs	233
Mull of Galloway	385
South Stack	323
Rathlin	590

2. Spending attracted to the local region

i. Further refinement of the day-tripper calculations

Several key assumptions were made when determining how much money in a typical day-visit is actually brought in to the local region. Firstly, it was assumed that people who visit an RSPB site within their local area do not bring additional economic activity because of their visit; they would probably have spent their money locally even if they were not visiting the reserve. This assumption means that the spend estimates in this report will be conservative, as it does not account for local people spending their money outside of the local area if the reserve did not exist, i.e. local spend attributable to seabirds is not considered despite being spending that is kept within the area.

The second underlying assumption, however, is that non-locals making day-trips do bring additional economic benefits to the region as their money probably would not have otherwise been spent in the region. Indeed, further to this general assumption, the study also attributes all of the spend by these visitors on the day of their visit to the visit itself, given that it will generally take up most if not all of their day.

Therefore, for this study, only non-local day-tripper (as opposed to local day-tripper spending) and holidaymaker spending was included. Table 3 demonstrates the number of non-local day-trippers as a result of the readjusted calculation, based on these assumptions.

Table 3: Number of non-local day-trippers, as defined by those ticking options 2 and 4 of Question 10 on the questionnaire (or Question 12 of the Rathlin questionnaire)

Site	Number of non-local day-trippers
Bempton Cliffs	216
Mull of Galloway	152
South Stack	197
Rathlin	1575

3. Spending attracted to the local region as a result of seabirds and sealife

Note – The following section applies to each reserve except Rathlin Island, which is covered in section 4, because the Rathlin question did not have the same questions as the other reserves surveyed.

Upon establishing how much money is actually brought to the local region as a result of each reserve, it was important to calculate how much of this was attributable to the seabirds and sealife in particular. This was done as a function of one of the questions, Question 13²¹, in the people-engagement surveys:

Q13. Would you say the chance to watch sea birds was the main reason for your visit to this area, one of the reasons or did it not influence your decision to visit this area at all?

Response options:

1. Main reason for visiting
2. One of the reasons for visiting
3. Didn't influence my decision to visit at all

For each reserve **mean spend per person per day** was calculated for both non-local day-trippers and holidaymakers. Where included by non-local day-trippers, accommodation figures were removed for this calculation under the assumption that, being a day-tripper, people in this category would have no accommodation expenditures (or that their accommodation was not within the local area).

For those visitors that ticked option 1 “*main reason for visiting*”, 75% of a visitor’s expenditure was attributable to seabirds, 25% if they ticked option 2, and 0% if they ticked option 3. For example, 0% means that none of the visitor’s spending was attributable to seabirds and sealife, because of the answer they gave. This approach also ensured a sense of continuation and comparability between this report and previous RSPB reports of a similar nature.

²¹ See Appendix I for a full copy of Q13.

The spending attributed to seabirds and sealife calculations are illustrated in Tables 4 and 5, below.

Table 4: Spend attributable to seabirds: non-local day-trippers

Site	% attributable to seabirds	Portion of respondents ²²	Mean spend per day-tripper (£)	Spend attributable to seabirds (£)
<i>Bempton</i>				
Option 1*	75	0.67	16.46	8.33
Option 2**	25	0.27	16.46	1.09
Option 3***	0	0.06	16.46	0.00
TOTAL				9.42
<i>Mull of Galloway</i>				
Option 1	75	0.16	14.25	1.75
Option 2	25	0.40	14.25	1.42
Option 3	0	0.44	14.25	0.00
TOTAL				3.17
<i>South Stack</i>				
Option 1	75	0.25	16.91	3.17
Option 2	25	0.49	16.91	2.05
Option 3	0	0.26	16.91	0.00
TOTAL				5.22

* Option 1 "Main reason for visiting"

** Option 2 "One of the reasons for visiting"

*** Option 3 "Didn't influence my decision to visit at all"

²² 'Proportion of respondents' – This is not the same as the total number of people that the surveys covered. The total number of people is the number of survey respondents multiplied by the number of people within their respective parties. Survey respondents are only those people filling in the survey.

Table 5: Spend attributable to seabirds: holidaymakers

Site	% attributable to seabirds	Portion of respondents ⁵	Mean spend per holiday-maker (£)	Spend attributable to seabirds (£)
<i>Bempton</i>				
Option 1*	75	0.29	46.30	10.16
Option 2**	25	0.43	46.30	4.94
Option 3***	0	0.28	46.30	0
TOTAL				15.10
<i>Mull of Galloway</i>				
Option 1	75	0.04	34.07	1.09
Option 2	25	0.75	34.07	6.40
Option3	0	0.21	34.07	0
TOTAL				7.49
<i>South Stack</i>				
Option 1	75	0.20	18.26	2.71
Option 2	25	0.55	18.26	2.51
Option 3	0	0.25	18.26	0
TOTAL				5.22

* Option 1 "Main reason for visiting"

** Option 2 "One of the reasons for visiting"

*** Option 3 "Didn't influence my decision to visit at all"

4. Analysis of the Rathlin Island Questionnaires

As mentioned earlier, the questionnaires used in Rathlin did not include spending questions with which to derive the amount spent per party. However, Rayment and Dickie (2001)²³ acquired a mean spend per visitor to Rathlin Island of £9.39 in 2000 (though this figure did not include accommodation or ferry costs). After taking account of UK Government Gross Domestic Product Deflators²⁴, the estimated mean spend per person for 2009 is £11.58.

Ferry costs were included in this figure using the 2009 cost of a return trip on the ferry and assuming that all day-trippers spent this in their daily spend. For

²³ A survey in August 2000 undertaken by the RSPB and The National Trust found that visitors to Rathlin spent an average of £9.39 each in the local economy (excluding ferry and accommodation costs). Rayment, M & Dickie, I (2001) *Conservation Works... for local economies in the UK*. The RSPB, Sandy, UK. http://www.rspb.org.uk/Images/conservationworks_tcm9-132933.pdf

²⁴ HM Treasury (2009), based on the difference between the 2008-2009 and 2000-2001 GDP deflators.

holidaymakers, this cost was divided by the average number of nights spent on the island (which was estimated by taking the average number of nights spent in the local area by holidaymakers at Bempton Cliffs, Mull of Galloway and South Stack Cliffs Reserves, where such data was available²⁵). To get a more accurate ferry cost estimation, an estimate of the number of adult and child day-trippers and holidaymakers that made up the survey sample was made (based on this assumption: 1- and 2-people parties having no children, 3-people parties having 1 child, 4-people parties having 2 children, and 5-10-people parties having 3 children). The mean return ferry journey cost of £8.86 for day trippers and £1.55 per day for holidaymakers²⁶, was thus an average of the child and adult ticket price, based on the portion of children and adults in the survey sample. For example, if 60% of holidaymakers in the survey were adults and 40% were children, then the average ferry cost is 60% that of an adult fare, and 40% that of a child's fare for holidaymakers.

Accommodation costs were also included in the holidaymaker calculations. This was simply an average of the mean daily accommodation costs at the Bempton, Mull of Galloway and South Stack reserves. The average daily accommodation cost was estimated to be £45.67, over an average of 5.89 nights spent on the Island.

Upon gaining an estimate of how much money is actually brought to the local region by day-trippers and holidaymakers, it was important to calculate how much of this was attributable to the seabirds and sealife in particular. This was done as a function of one of the questions in the Rathlin Island people-engagement survey:

Q. Which of the following statements best describes your interest in birds, nature and the outdoors?

Response options:

1. *While I am interested in wildlife and nature as a whole, my main interest is definitely in birds*
2. *While I am interested in birds, my main interest is in wildlife and nature as a whole*
3. *I don't have a particular interest in wildlife and nature but enjoy walking and/or other outdoor pursuits*
4. *I don't have a particular interest in any of these areas*

In analysing the responses to this question, the following assumptions were made: 75% of a visitor's expenditure was attributable to seabirds if they ticked option 1, 25% if they ticked option 2, 10% if they ticked option 3, and 0% if they ticked option 4.

The Rathlin Island visitor spend calculations are illustrated in tables 6, 7 and 8.

²⁵ Average number of nights stayed = 5.89.

²⁶ From Rathlin Island Ferry Ltd: 2009 fares – Adult return = £10.60; child's return = £5.30.

Table 6: total spend attributable to seabirds; Rathlin Island (accommodation and ferry costs excluded)

	% attributable to seabirds	Number of survey respondents ⁷	Portion of respondents	Mean spend per person (£)	Spend attributable to seabirds (£)
Option 1*	75	73	0.144554	11.58	1.26
Option 2**	25	282	0.558416	11.58	1.62
Option 3***	10	134	0.265347	11.58	0.31
Option 4****	0	16	0.031683	11.58	0.00
TOTAL					3.18

* Option 1 "While I am interested in wildlife and nature as a whole, my main interest is definitely in birds"

** Option 2 "While I am interested in birds, my main interest is in wildlife and nature as a whole"

*** Option 3 "I don't have a particular interest in wildlife and nature but enjoy walking and/or other outdoor pursuits"

**** Option 4 "I don't have a particular interest in any of these areas"

Table 7: Spend attributable to seabirds: non-local day-trippers; Rathlin Island

Site	% attributable to seabirds	Portion of respondents ²⁷	Mean spend per day-tripper (£)	Spend attributable to seabirds (£)
Option 1	75	0.15	20.44	2.25
Option 2	25	0.54	20.44	2.74
Option 3	10	0.27	20.44	0.56
Option 4	0	0.04	20.44	0.00
TOTAL				5.55

Table 8: Spend attributable to seabirds: holidaymakers; Rathlin Island

Site	% attributable to seabirds	Portion of respondents ⁷	Mean spend per holiday-maker (£)	Spend attributable to seabirds (£)
Option 1	75	0.14	58.79	6.13
Option 2	25	0.61	58.79	8.95
Option 3	10	0.25	58.79	1.44
Option 4	0	0.01	58.79	0.00
TOTAL				16.53

²⁷ This is not the same as the total number of people that the surveys covered. The total number of people is the number of survey respondents multiplied by the number of people within their respective parties. Survey respondents are only those people filling in the survey.

5. Economic Impact: Total Additional Spend

These day-tripper and holiday-maker mean spend values for each of the four reserves were used to calculate total economic impact of the reserves by multiplying them by the reported number of visits. For example, table 9 shows the total spend calculation in the case of Bempton in 2009:

Table 9: Total Spend attributable to seabirds by all visitors; Bempton 2009

Type of visitor	Local	Non-local Day-trippers	Holiday makers	No response	Total
Proportion of total	9%	43%	47%	1%	100%
Number of visits	6,113	29,337	31,637	N/A	67,490
Mean additional spend per visit	£0.00	£9.42	£15.10	N/A	N/A
Total Spend	£0.00	£276396.01	£477,794.69	£0.00	£754,190.71

This table shows the total number of visits at the reserve in this year, 67,490²⁸, which is broken down into each type of visitor based on proportions obtained from the sample surveys. The estimated total number of visits by of each type of visitor are then multiplied by the relevant mean additional spend per person to give the total expenditure made by each type of visitor. The sum of these figures gives total additional visitor spend of £754,190.71 in the local economy resulting from seabirds at Bempton in 2009.

6. Economic Impact: Additional FTE Jobs

The above calculations were the basis for identifying the *additional* economic impact on the local region of the seabirds and sealife. The attributable spend estimates can be used to calculate the corresponding employment impacts. Applying an employment effect multiplier given by the latest Scottish Government input:output tables, the full time equivalent (FTE) jobs supported by this spending can be estimated.

²⁸ For Bempton in 2009, there was incomplete annual visitor data. The reserve had recorded 62,622 visits for the first 9 months, so visits for the final 3 months were estimated based on the monthly proportions of visitors that were recorded in 2008. Therefore the assumption was made that the monthly distribution of visitors in 2009 would be roughly the same as in 2008.

It would be most accurate to use local multipliers to assess the impact of visitor spending (Shiel *et al*, 2002). However, they do not exist for many locations and current models that individually estimate the economic impacts of tourism spend for a given region were not available.

The most extensive and up to date multipliers are from the most recent (2004) Scottish Government input:output tables, available from the Scottish Government website²⁹. The 'Type II Employment effect' multiplier provides information on how many jobs are supported by £1million spend in any given industry, based on the direct, indirect, and induced effects of spend in that industry. As tourism spend is not accounted for in these tables, it was necessary to estimate a separate employment effect multiplier to reflect the industries in which RSPB visitor spending usually falls. This was done by reviewing previous RSPB reports that studied the distribution of visitor spend (Rayment & Dickie, 2001; Rayment *et al*, 2000³⁰).

The reported areas of spend were allocated to the most relevant industry sectors covered by the Scottish tables, for example, spend on 'accommodation', 'drinks in pub/cafe' and 'meals' was allocated to the 'Hotels, catering, and pubs' multiplier. A number of assumptions were made regarding spend on 'other', 'food from shop', 'gifts/souvenirs' etc, which were represented by a 'Bundle of goods' multiplier, detailed below. The results from this review were consistent with the claim that tourism spend at RSPB reserves is mostly accounted for by spend in 'Hotels, catering, and pubs' (Shiel *et al*, 2002). The table below shows the results of this process, along with the associated multipliers from the Scottish Government tables.

Table 10: Calculating a multiplier for visitors to RSPB reserves

Scottish Government Multiplier Category	Proportion of Visitor Spend	Type II Employment Effect Multiplier
Hotels, Catering, Pubs	75%	36.5
Other Land Transport	15%	24.22
Bundle of Goods ³¹	10%	10.97
Total	100%	$= (0.75 \times 36.5) + (0.15 \times 24.22) + (0.1 \times 10.97)$ =32.105

²⁹ The Scottish Government (2004),

<http://www.scotland.gov.uk/Topics/Statistics/Browse/Economy/Input-Output/Downloads>.

³⁰ Rayment, M, Lewis, P, Henderson, R & Broom, G (2000) *Valuing Norfolk's Coast: Environment - Wildlife - Tourism - Quality of Life*. The RSPB, Norwich, UK.

http://www.rspb.org.uk/Images/Valuing_norfolks_coast_tcm9-203973.pdf

³¹ Average of the 2004 Scottish employment effects for Soft Drinks, Tobacco, Spirits and Wine etc, Confectionary, Other food products, Leather Goods, Wood and Wood products.

Therefore the estimated employment effect multiplier based on RSPB visitors' spend is 32.1, meaning that £31,153 of RSPB visitor spending supports one FTE job in the local economy. After taking account of UK Government Gross Domestic Product Deflators (HM Treasury, 2009), it was calculated that £35,083 of visitor spend supports one FTE job in 2009 prices. Consequently, for the study, an average wage of £35,000 was used to illustrate how many FTE jobs were supported by visitor spend.

To calculate how many FTE jobs were supported in the local economy by visitors, total spend attributable to seabirds and sealife in the area was divided by this average wage to find out approximately how many jobs seabirds and sealife supported locally.

7. Semi-structured interviews

Semi-structured interviews were carried out with businesses local to each of the four reserves studied, as well as with reserve staff at the reserves, in order to gain a deeper insight into the local economic impacts of seabirds and sealife. The questions used are attached in Appendices II and III.

It is important to note, however, that the businesses used in the interviews were contacted through the local reserves in each region. This was simply due to time constraints and the ease of acquiring an interview with local businesses through local reserve contacts. It should not therefore be assumed that these companies are an adequate cross-section of the region's business sector and indeed were not treated as such during this study rather give an indication of the benefits that the reserves bring.

Appendix I

Visitor questionnaire employed at reserves (except Rathlin)



Visitor Survey

We are conducting a survey of visitors to our reserves to help us understand how they feel about their visit and plan for the needs of visitors in the future. To help us do this, we would be grateful if you would take a few minutes to complete this questionnaire after your visit today. Please complete the questionnaire by ticking the appropriate box or by writing your answer in the space provided. Once completed, please return it to the Visitor Centre or hand it to a member of staff. Many thanks for your help.

Q1. a) Firstly, is this your first visit to this particular RSPB reserve?

Yes ₁ No ₂ → Please answer b)

b) If no, approximately how often do you visit this site?

Every day	<input type="checkbox"/> ₁	Once or twice a month	<input type="checkbox"/> ₃	Once a year	<input type="checkbox"/> ₅
Once or twice a week	<input type="checkbox"/> ₂	Once every six months	<input type="checkbox"/> ₄	Less often	<input type="checkbox"/> ₆

Q2. When did you/your party decide you wanted to visit this reserve today?

Spontaneous – only decided today ₁
Planned in advance – decided before today ₂
Decided partly today and partly before today ₃

Q3. Which of the following statements best describes how you found us today?

Have visited before and so knew about the reserve	<input type="checkbox"/> ₁	I am touring the area and noticed the road signs/saw it on a map	<input type="checkbox"/> ₅
I was told how to get here by friends/family	<input type="checkbox"/> ₂	I found the details in the RSPB handbook	<input type="checkbox"/> ₆
I found the details on the RSPB Web site	<input type="checkbox"/> ₃	I saw the details in 'Birds' magazine	<input type="checkbox"/> ₇
I am touring the area and saw leaflets/posters	<input type="checkbox"/> ₄	Other (please specify).....	<input type="checkbox"/> ₈

Q4. When you/your party first arrived at the reserve today, which, if any, of these information sources did you use to help plan your visit?

Notice board – for details on opening Reserve leaflet (containing the

- | | | | |
|-----------------------------------|--------------------------|--|--------------------------|
| times/entry fees etc | <input type="checkbox"/> | map of the reserve) | <input type="checkbox"/> |
| Information from staff/volunteers | <input type="checkbox"/> | Displayed details on activities for children | <input type="checkbox"/> |
| The 'What's About' board | <input type="checkbox"/> | Other (<i>please specify</i>)..... | <input type="checkbox"/> |

Q5. During your visit, was the information you required easily accessible?


- Yes No

Q6 Which, if any, of these activities have you/your party already undertaken while on your visit to this reserve today or do you plan to undertake later on today on the reserve?

- | | | | |
|---|--------------------------|---|--------------------------|
| Watch/look for birds | <input type="checkbox"/> | Look for plants or other wildlife | <input type="checkbox"/> |
| Go for a walk/follow a trail | <input type="checkbox"/> | Visit one or more hides | <input type="checkbox"/> |
| Take part in an organised walk/children's activity | <input type="checkbox"/> | Look around the Visitor Centre/displays | <input type="checkbox"/> |
| Buy something to eat or drink from the reserve's café/kiosk | <input type="checkbox"/> | Look around/buy something from the reserve's shop | <input type="checkbox"/> |
| | | Other (<i>please specify</i>)..... | <input type="checkbox"/> |

Q7. The RSPB could provide information designed to tell you a little bit more about this reserve and why it is so special. Which, if any, of these subjects would you like extra information made available about this reserve?

- | | | | | | |
|---|--------------------------|--|--------------------------|---------------------------------|--------------------------|
| Why the RSPB thinks the site is important | <input type="checkbox"/> | How climate change may affect the site | <input type="checkbox"/> | Archaeology/History of the site | <input type="checkbox"/> |
| Wildlife on the reserve | <input type="checkbox"/> | Other (<i>please specify</i>) | <input type="checkbox"/> | None of these | <input type="checkbox"/> |

Continued overleaf 

Q8. If they could be provided, which, if any, of these would make your visit to this reserve more enjoyable in the future?

- | | |
|---|--------------------------|
| Self-guided walks supported by 'I-Spy' type leaflets/booklets | <input type="checkbox"/> |
| Guided walks around the reserve led by staff/volunteers | <input type="checkbox"/> |
| Staff/volunteers located around the reserve to point out things of interest | <input type="checkbox"/> |
| Seasonally updated information boards sited at different parts of the reserve | <input type="checkbox"/> |
| 'Hands on' activities such as pond dipping, bug hunting, etc | <input type="checkbox"/> |
| Specially designed trails to see butterflies, wildflowers etc | <input type="checkbox"/> |
| Special out of hours visits to see badgers, bats, deer etc | <input type="checkbox"/> |
| Other – please specify: | <input type="checkbox"/> |

Q9. Which of the following statements best describes your interest in birds, nature and the outdoors?

- While I am interested in wildlife and nature as a whole, my main interest is definitely in birds ₁
- While I am interested in birds, my main interest is in wildlife and nature as a whole ₂
- I don't have a particular interest in wildlife and nature but enjoy walking and/or other outdoor pursuits ₃
- I don't have a particular interest in any of these areas ₄

Q10. Which of the following statements best describes you personally?

- I live local to this reserve ₁ → Skip to Q16
- I have come from home on a day trip to visit this reserve ₂ → Go to Q12
- I am holidaying in the area and staying near to this reserve ₃ → Go to Q11
- I am holidaying elsewhere but made a day trip to visit this reserve ₄ → Go to Q11

Q11. By the time you leave, how many nights in total will you have stayed at the location where you are staying?

Please write in: _____

Q12. When planning your trip/holiday, which, if any, of these factors influenced your decision to visit this area?

- | | | | | | |
|-----------------------------|---------------------------------------|----------------------------|---------------------------------------|---------------------------------|---------------------------------------|
| Scenery/landscape | <input type="checkbox"/> ₁ | To visit family/friends | <input type="checkbox"/> ₄ | Peace & tranquillity | <input type="checkbox"/> ₇ |
| The chance to see birds | <input type="checkbox"/> ₂ | Historic buildings/sites | <input type="checkbox"/> ₅ | Walking/climbing | <input type="checkbox"/> ₈ |
| Opportunity to see wildlife | <input type="checkbox"/> ₃ | Newspaper/magazine article | <input type="checkbox"/> ₆ | Other (<i>please specify</i>) | <input type="checkbox"/> ₉ |

Q13. Would you say the chance to watch (sea) birds was the main reason for your visit to this area, one of the reasons or did it not influence your decision to visit this area at all?

- Main reason for visiting ₁
- One of the reasons for visiting ₂
- Didn't influence my decision to visit at all ₃

Q14. If this RSPB reserve was not in this area, would you have taken your trip/holiday elsewhere?

- Yes ₁ No ₂ Not sure ₃

Q15. In total, can you say approximately how much your party will spend today on:

	Spend £		Spend £
Accommodation	_____	Gifts & souvenirs	_____
Fares & petrol	_____	Entry fees/entertainment	_____
Meals & drinks	_____	Other (<i>please specify</i>)	_____

Q16. How many people in your party today are:

Adults (aged 18+) _____ Children _____

Q17. Are you currently a member of the RSPB?

Yes ₁ No ₂

Q18. In which county and postcode do you normally live? (Please write in)

County: _____⁽⁵⁶⁻⁵⁸⁾ Postcode: _____⁽⁵⁹⁻⁶⁶⁾ Today's date: _____

**Thank you very much for taking the time to complete this questionnaire
Please hand it into a member of staff or volunteer**

RSPB registered charity England and Wales no 207076, Scotland no. SCO37654

Appendix II

Semi-structured interview for reserve staff at each of the four reserves

Hello, and thanks for agreeing to take part in this survey for the RSPB. My name is ... and we're currently conducting a study to look at the local economic benefits of a sample of RSPB coastal reserves. I am very interested in your experience of how the local natural environment, seabirds and sealife in particular, affect visitor numbers to the reserve and affect the local economy. The results of this survey will be used by the RSPB to help understand the value of our seabird reserves to the local economy and hence the economic value of protecting those seabirds when at sea using marine protected areas. Therefore, I'm very grateful for your time in answering these questions.

Could you give me some background on the reserve...

1. What time of the year is the reserve open?
2. Number of visits per annum? Per quarter?
3. When did the reserve open? Has there been any difference in tourism since opening (e.g. number of visits, reasons for visits)? [for those reserves that have been open for decades, the question might be more useful from the perspective of changes over the last 5-10 years and over the last 1-2 years.]
4. What they think attracts visitors and what makes their reserve 'special'.
5. Ask their opinion about the local economic impact of the reserves... what services do their visitors use, i.e. boat trips, B&Bs, etc.
6. Ask them if they have anything written up in marketing material, development plans or funding bids which you could use.
7. Agricultural tenancies; grazing, shooting, extraction of timber?
8. Have there been any notable fluctuations/impacts on bird populations over the last year/more long term? Did this affect visit numbers/visitor satisfaction?
9. Do visitors have access to the site out of season? If so, what activities do they engage in outside of opening season? Are entrance fees charged out of season?
10. More general question about what the impact on the local economy would be if the seabird population/marine wildlife was irreparably damaged/disappeared overnight.

Reserve management questions...

1. How many part-time and full-time staff do you employ (please note any seasonal differences)?
2. How many part-time and full-time volunteer staff work at the Reserve (please note any seasonal differences)?
3. What is the Reserve's annual/quarterly turnover? [*use the ranges from business questionnaire?*] From entrance fees, the shop, the café (if such breakdowns are available). {not sure we need this?}
4. Has any contract work (e.g. building work) been carried out over the last year/last 5 years? Were local contractors employed? Are you planning any contract work in the near future? If so, what impact do you expect it to have on visitor numbers?

For Rathlin...

1. With approximately 80 people living on the island, and 2 of those being employed by the RSPB, what is the likelihood that these employees have gained work on the island in the scenario that Rathlin no longer had marine wildlife interests such as seabirds? (ie: needed to look for employment *outside* of the local area)
2. How much is a ferry ticket to Rathlin?
3. How many ferry-users visit the reserve? (it would be nice to have the visit figures from Andrew to hand here. Then, if Caledonian McBrayne ferries are prepared to cooperate, this just needs to be matched with the annual ferry-user figures)

Appendix III

Semi-structured interview for local businesses at each of the four reserves

Hello, and thanks for agreeing to take part in this survey for the RSPB. My name is ... and we're currently conducting a study to look at the local economic benefits of a sample of RSPB coastal reserves. I am very interested in your experience of how the local natural environment, seabirds and sealife in particular, affect your business. The results of this survey will be used by the RSPB to help understand the value of our seabird reserves to the local economy and hence the economic value of protecting those seabirds when at sea using marine protected areas. Therefore, I'm very grateful for your time in answering these questions.

1. *<intro question>* How important is tourism?

2. What percentage of your turnover do you estimate to come from tourism?

0% <10% 25% 50% 75% 90-100%

3. *<feeder question>* How important are seabirds to tourism? *<then>* What percentage of your turnover do you estimate to come from tourists who visit for local seabirds and sealife?

0% <10% 25% 50% 75% 90-100%

If too difficult to answer, ask;

4. Does [insert Reserve name] make any noticeable difference to your turnover? Or alternatively, would there be a noticeable loss if the seabirds weren't there anymore?

5. Are you familiar with the RSPB Reserve [insert name]. How relevant is it in attracting visitors to the local area?

6. Do you actively promote your business to the birdwatching or wildlife watching community (e.g. advertise in magazines/websites) or at the [RSPB Reserve]?

7. What sector does your business operate in?

8. How many part-time and full-time staff do you employ (please note any seasonal differences)?

9. Choice question, ask:

i. What is your approx turnover

or

ii. Which turnover category would you place your business in?

- £0 – 50,000 per annum
- 50,000-100,000 per annum
- £100,000 - 250,000 per annum
- £250,000 - 500,000 per annum
- £500,000 - 1 million per annum
- £1 million – 6.5 million per annum
- £6.5 million - £25.9 million per annum
- More than £25.9 million per annum

The results of this survey will contribute to a publication I am writing for the RSPB on the role of the natural environment, seabirds and sealife in particular, in supporting jobs and businesses in the local area. Would you be willing for your responses to be used in quotes and for your business to be mentioned by name?

Ask for name and details.

