WILDLIFE AT WORK
THE ECONOMIC IMPACT OF WHITE-TAILED EAGLES ON THE ISLE OF MULL
Foreword by Kate Humble

There are few wildlife sights in the UK more thrilling and awe-inspiring than an adult white-tailed eagle soaring in the blue sky. I know because I’ve been to the Isle of Mull several times and have experienced it for myself. That glistening white tail and the massive 2.5 metre wing span just stops you in your tracks. Breathtaking!

The impressive results of this new white-tailed eagles on Mull economic survey show that many, many other visitors have also done the same. They too have been left spellbound by the sights and sounds of this truly impressive bird of prey – the UK’s largest – against the backdrop of a beautiful Scottish landscape.

Many factors have helped achieve these results – from the interest generated by television programmes to the important work of the RSPB, our partners, funders, land managers and the local community on Mull. All have played their essential part in making Mull Eagle Watch what it is today – one of the world’s most successful and respected wildlife conservation and tourism projects.

This study, which repeats the survey and process first carried out in 2005, enables us to compare directly the two pieces of work and to see the real value and worth of what one amazing bird species can do for one local economy. Just imagine the economic impact of similar Date with Nature projects with other species that the RSPB and our friends run across the UK.

Our wildlife is precious and under threat, and the RSPB and its partners are working hard to safeguard it for future generations. Living with predatory species like eagles is not always easy on this crowded planet. We need to acknowledge this and recognise the challenges it poses for some communities. We need to find ways to reward positive management that helps protect both the eagles and the livelihoods they sometimes affect.

For some, just enjoying seeing these birds around may be reason enough to look after them, but with tangible economic benefits to consider, it also shows that white-tailed eagles can really pay their way in society.

I for one will be heading back to Mull to see these stunning birds whenever I can.

Kate Humble
RSPB President
Overview
Since the reappearance of white-tailed eagles on the Isle of Mull, these birds have delivered huge benefits to people, both through direct enjoyment and through the impacts the birds have within the local economy. Visitors are drawn to Mull from all over the UK and overseas to see these charismatic birds. They spend money, which supports significant additional income and jobs on the island. In 2010, the RSPB commissioned an independent series of surveys on Mull to investigate the extent of the economic benefits local businesses gain from this tourism. The main findings of this study were:

- £5 million of tourist spend on Mull is attracted every year by white-tailed eagles
- 110 jobs are supported by this spend each year
- £2.4 million of local income is supported each year
- economic benefits delivered by white-tailed eagles on the Isle of Mull have more than trebled since 2005.

White-tailed eagles on Mull
The white-tailed eagle is the fourth largest eagle in the world, and the adult’s pale head, large yellow beak and trademark white tail make it one of the UK’s most spectacular species. These native birds were driven to extinction in 1918 largely as a result of targeted persecution and changes in land use that destroyed their natural habitats. The reintroduction of white-tailed eagles to Scotland, undertaken by the Government’s Nature Conservancy Council (now Scottish Natural Heritage) in 1975, continues to be a success; in 2010, there was a small, self-sustaining population of 14 pairs on Mull and 52 pairs in Scotland. The eagles have attracted attention from visitors and media across the UK, and are becoming an iconic feature of the UK’s natural heritage.

Local economies and the environment
The misconception that economic growth and the environment are conflicting agendas is steadily being driven from the rhetoric of decision-makers across the UK. Governments are increasingly acknowledging that for growth to be sustainable, it can be achieved only alongside a far more responsible attitude to nature. In times of austerity, the challenges of tackling unemployment and preventing the degradation of our natural environment are accentuated, making it more important than ever to recognise that local economic development and conservation can go hand in hand.

Great places for wildlife are also great places for people. The natural environment offers huge benefits to society, through physical and mental health, education, recreational opportunities, and cultural and spiritual wellbeing. In addition to these benefits afforded to people who engage directly with nature, wildlife attractions are a significant and diverse source of economic activity for surrounding communities.

There is a growing body of evidence around the ways in which nature and wildlife impact tangibly upon local employment and income. Charismatic species, nature reserves and areas of natural beauty draw huge numbers of visitors to regions across the UK every year. This green tourism has significant impacts within local economies, supporting business in sectors such as catering, accommodation and recreational services. This report details such impacts in the case of white-tailed eagles on the Isle of Mull.

The surveys
Over eight weekends during the summer 2010, 408 face-to-face interviews were conducted with parties visiting Mull, accounting for 1,228 people at five different sites on the island. The surveys recorded information on the type of visitor interviewed eg holidaymaker or day-tripper, the number of people in the group, the length of time they were
staying, and the amount of money they were likely to spend in a day. Crucially, the surveys also asked respondents about their motivation for visiting the area, so that a judgement could be made about how important the eagles were as an attraction to Mull. The surveys were organised, performed and analysed by Progressive, an independent market and social research agency.

Initial results
- White-tailed eagles were an important factor influencing the decision to come to Mull for almost a quarter (22%) of all parties interviewed.
- Other aspects of the natural environment featured prominently in the most popular reasons given for visiting (Figure 1), in particular scenery/landscape (79%) and birds/wildlife in general (36%).
- Visitors to Mull came from all over the UK with respondents travelling an average of 250 miles, and some even as far as 600 miles. The map shows the range and spread of distances travelled.

![Figure 1: factors influencing the decision to visit Mull](image-url)
The economic impacts of white-tailed eagles on Mull

Total spending by visitors on Mull
To estimate the total amount spent by visitors on Mull each year, we used average figures from the survey data on daily party spend, party size and length of stay. We then applied these figures to the total annual visitor numbers for the island to scale up the spending for all annual visitors.

<table>
<thead>
<tr>
<th>Visitor type</th>
<th>% visitors</th>
<th>Number of visitors</th>
<th>Number of parties (average party size of 3.01)</th>
<th>Daily party expenditure (£)</th>
<th>Length of stay (days)</th>
<th>Total expenditure (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holidaymakers</td>
<td>79</td>
<td>474,000</td>
<td>157,475</td>
<td>116.46</td>
<td>5.28</td>
<td>96,832,814</td>
</tr>
<tr>
<td>Day-trippers</td>
<td>21</td>
<td>126,000</td>
<td>41,860</td>
<td>64.81</td>
<td>1</td>
<td>2,713,075</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>600,000</td>
<td>199,335</td>
<td>99,545,889</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total annual spending by visitors to Mull is estimated at nearly £100 million. As shown in Table 1, holidaymakers contribute significantly more than day-trippers to local spending due to higher visitor numbers, higher daily spend, and a far longer average period of stay.

Spending attributable to white-tailed eagles
To estimate how much of this £100 million could be attributed directly to the white-tailed eagles, visitors were asked about what brought them to Mull; white-tailed eagles were suggested as one of 13 possible options. The responses to this question are shown in Figure 1. Those who stated that white-tailed eagles were among their motivations for visiting were then asked whether this was their main reason or just one of their reasons for choosing to visit Mull. Using these responses, it was possible to assign a proportion of each visiting party’s spend directly to the white-tailed eagles. Two different attribution rates – high and low – for each type of motivation response were used to give a range of estimates for total attributable spend (Table 2).

<table>
<thead>
<tr>
<th>How important were white-tailed eagles in visitors’ decisions to visit Mull</th>
<th>% of visitor responses</th>
<th>% of spending attributed to white-tailed eagles from these responses</th>
<th>Total expenditure attributed to white-tailed eagles (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One of the reasons</td>
<td>Low 21.08</td>
<td>High 20 33</td>
<td>Low 4,196,855 High 6,924,810</td>
</tr>
<tr>
<td>Main reason</td>
<td>Low 1.23</td>
<td>High 60 75</td>
<td>Low 734,649 High 918,311</td>
</tr>
<tr>
<td>Total</td>
<td>22.31</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on these calculations, white-tailed eagles support a minimum of about £5 million and a maximum of about £8 million of tourist spend per year on Mull. It must be noted that the attribution rates used here were conservative compared with a similar study performed by the Scottish Government in 2010. Hence this study’s figures are likely to be underestimates.

1. For day-trippers, any reported spend on accommodation was excluded and a standard stay of one full day was used.
Full-time equivalent (FTE) jobs supported

Estimating the jobs and income supported by this tourism spending involved using economic models that map the ways money travels between industry sectors in the economy. Scottish Government figures provided the data for this analysis and made it possible to work out how much spend – specifically in the sectors that visitors to Mull use their money – would be needed to support one job locally.

<table>
<thead>
<tr>
<th>Range</th>
<th>Spending attributable to white-tailed eagles (£)</th>
<th>Jobs supported(^4)</th>
<th>Income supported (£)(^5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low estimate</td>
<td>4,931,503</td>
<td>110.15</td>
<td>2,416,437</td>
</tr>
<tr>
<td>High estimate</td>
<td>7,843,121</td>
<td>175.19</td>
<td>3,843,129</td>
</tr>
</tbody>
</table>

It was estimated that approximately £45,000 of tourist spend on Mull is required to support one FTE job in the local economy, and that around 50 pence of every £1 spent contributes to income in the local economy. Using these figures, the assessment found that white-tailed eagles on Mull support between 110 and 175 FTE jobs and from £2.4 million to £3.8 million of local income each year (Table 3).

Trends since 2005

A similar study was carried out in 2005 and published in *Watched Like Never Before*, an RSPB report on the economic impacts of charismatic species\(^6\). To make comparisons as robust as possible, the same questionnaire, sampling method and analysis were used in this 2010 update of the study. Looking at the changes over the past five years, the economic impacts of white-tailed eagles on Mull have increased dramatically. The minimum estimates of spending in the local economy that can be attributed to the white-tailed eagles has more than trebled from £1.4 million to £4.9 million, as have FTE jobs supported in the local community from around 36 to 110.


\(^5\) Where £1 worth of local spend supports £0.49 of local income on Mull. RSPB calculations using Scottish Government input/output tables.

\(^6\) Where £44,769 of spend by visitors supports one FTE job in the local economy. RSPB calculations using Scottish Government input/output tables scaled up to 2009 prices using HMT GDP deflators.
There has been an increase in the number of visitors to Mull from around 350,000 in 1997 to around 600,000 in 2010\(^7\), as well as a considerable increase (from 15\% to 22\%) in the proportion of visitors who state white-tailed eagles as a motivation for visiting the area (Figure 2). Although the amount of money spent per party has remained roughly the same, smaller average party sizes mean that the amounts spent by individual visitors has increased for both holidaymakers and day-trippers. Tourism to Mull held up well through the recession, which again shows the value people place on experiences with nature such as those offered by white-tailed eagles on Mull. Holidaymakers stay for more nights on average than they did in 2005, and form a greater proportion of the total visitors (Figure 2).

![Figure 2: key tourism trends from 2005-2010 on Mull](image)

<table>
<thead>
<tr>
<th>Percentage Increase</th>
<th>Holidaymaker Spend</th>
<th>Day-tripper Spend</th>
<th>Nights Stayed</th>
<th>Attracted by White-tailed Eagles</th>
<th>Proportion of Holidaymakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>5</td>
<td>10</td>
<td>15</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>5</td>
<td>10</td>
<td>15</td>
<td>20</td>
<td>25</td>
<td>30</td>
</tr>
<tr>
<td>10</td>
<td>15</td>
<td>20</td>
<td>25</td>
<td>30</td>
<td>35</td>
</tr>
</tbody>
</table>

**National context**

The Scottish Government released a study in 2010 looking into the economic impact of wildlife tourism in Scotland, which was based on a survey of 2,620 households across the UK. This report found that wildlife tourism is responsible for £276 million of spend per year in the Scottish economy and supports 2,763 FTE jobs\(^8\). Based on these figures, white-tailed eagles on Mull account for a minimum of 1.8\% of total wildlife tourism spend and 4\% of the associated jobs in the country.

The report also assessed how this spend was distributed within Scotland and focused on seven main regions. Of the £65 million of wildlife tourism spend per year in The West Coast & Islands, and Loch Lomond & Trossachs, 7.7\% can be attributed to white-tailed eagles on Mull.

These figures emphasise the importance of wildlife within the national economy as a whole, and put the contribution of white-tailed eagles on Mull into context. Overall, it is clear that the eagles play an important role within a key industry for Scotland and its local economies.

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\(^7\) The initial figure used in 2005 was based on an estimate from Caledonian MacBrayne Ferries (Calmac) in 1997 abated for local traffic. An updated estimate from Calmac based on 2010 carrying statistics found annual visits by non-locals to Mull was 712,192. Therefore the independent figure of 600,000 visits from Travel Scotland is likely to be a conservative estimate.

Conclusion

White-tailed eagles continue to deliver huge economic benefits to the local community on the Isle of Mull, and provide a spectacular wildlife experience all year round for people from across the UK. The eagles are responsible for at least £5 million worth of spending in the local area, supporting 110 jobs and £2.4 million local income, and are a major contributor to an ever-growing base of tourism and economic activity on Mull.

The results of this study support similar reports that document the local economic benefits of charismatic species, such as recent RSPB work on the impacts of the Galloway Kite Trail in Dumfries and Galloway. At a time when increasing power and responsibility are being handed to local authorities, this is a valuable message for councils wishing to tackle both unemployment and declining trends in biodiversity. In this context, local decision-makers should recognise the ways in which conservation of the natural environment complements rather than hinders local economic growth.

It must also be remembered that these tangible economic benefits delivered by wildlife are just some of the many and varied benefits people gain from experiencing nature. Benefits to physical and mental health, education and other cultural and spiritual benefits exist that, despite being difficult to measure, are extremely important to the people and communities who receive them. The white-tailed eagles on Mull, and the success of the reintroduction programme across Scotland, contribute to wellbeing across the UK in many more ways than can easily be expressed in economic terms. This provides even greater reason for maintaining focus on this type of conservation.

Acknowledgements

Mull Eagle Watch – the year-round white-tailed eagle viewing and protection project on Mull – is a successful partnership between the Forestry Commission Scotland, Scottish Natural Heritage, the Mull & Iona Community Trust, Strathclyde Police and the RSPB.

This project has been financially supported by SNH and the BBC Wildlife Fund. It is supported and encouraged by VisitScotland and local marketing enterprises on Mull. The project has been successful thanks to the efforts of the local community and volunteers, and in particular the farmers and land managers who live and work with white-tailed and golden eagles and the challenges this can sometimes pose to their work. The RSPB would like to thank its team on Mull and Progressive for their role in performing the surveys and gathering and analysing the data used in this study.

The RSPB speaks out for birds and wildlife, tackling the problems that threaten our environment. Nature is amazing – help us keep it that way.

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