

The Economic Impact of White-tailed Eagles on the Isle of Mull



Adult white-tailed eagle, Isle of Mull. Image: Iain Erskine

Foreword

There are few wildlife sights in the UK more thrilling and awe-inspiring than an adult white-tailed eagle soaring in a blue sky. It's clear more people than ever are visiting Mull to see them with their own eyes.

The impressive results of this new 'Economic Impact of White-tailed Eagles on the Isle of Mull' report show that these visitors are bringing significant economic benefits to the island. They 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 social media and 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, award winning and respected wildlife conservation and tourism projects.

This 2019 study, which largely repeats the surveys and processes first carried out in 2005 and again in 2010, enables us to compare the three pieces of work and to see the real value and worth of what one amazing bird species can do for one local economy.

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 white-tailed eagles is not always easy on this crowded planet. We need to acknowledge this and recognise the challenges it sometimes poses for some people. We need to find ways to reward positive management that helps protect both the eagles and the livelihoods they can occasionally 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.



Adult white-tailed eagle with fish in the Sound of Mull. Image: Amanda Ferguson

Overview

Since the reintroduction of white-tailed eagles to Scotland and their arrival on the Isle of Mull, these birds have become a huge source of wellbeing to people, both through direct enjoyment and through indirect benefits they bring to the local economy. Visitors have been drawn to Mull from all over the UK and abroad to see these charismatic birds. They are spending money which supports significant additional income and jobs on the island. In a repeat of previous surveys, in 2019 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 as follows:

- **Between £4.9 million and £8 million of tourist spend on Mull is attracted every year by white-tailed eagles.**
- **Between 98 and 160 jobs are supported by this spend each year.**
- **A minimum of £2.1 million of local income is supported each year.**

White-tailed eagles on Mull

The white-tailed eagle is the fourth largest eagle in the world and the largest in the UK. The pale head, large yellow beak and trademark white tail of adults make it one of the UK's most spectacular species. This native bird of prey was driven to extinction in 1918, largely as a result of targeted persecution and changes in land use which destroyed their natural habitats. The reintroduction of white-tailed eagles, undertaken by the government's Nature Conservancy Council (now NatureScot) starting on Rum in 1975 and ending in Fife in 2012, continues to be a success, with a stable, self-sustaining population of 22 pairs on Mull and over 150 pairs Scotland-wide. Other reintroduction projects are underway in Ireland and on the Isle of Wight. The eagles have attracted attention from visitors and media across their range and are an iconic symbol of our natural heritage.

Local economies and the environment

Great places for wildlife can also be great places for people. The misconception that the environment and the economy are conflicting priorities is steadily being driven from the global psyche as we gain more knowledge about the benefits and wellbeing we receive from natural systems. It is becoming more and more apparent that sustainable economic growth must be achieved alongside a responsible attitude to nature and natural services.

Natural services, or ecosystem services, include both crucial life-supporting functions, like carbon sequestration and also life enhancing wellbeing benefits. The cultural and recreational experiences associated with charismatic species like white-tailed eagles can boost our sense of wellbeing and can stimulate economic benefits. The amount people are willing to spend as they interact with these birds gives some representation of how valuable a contribution these experiences make to their wellbeing. In addition, the economic impacts of this spending in local communities can be measured to establish tangible benefits to income and jobs supported by white-tailed eagle tourism.

We live in unprecedented times. Following the Covid pandemic, extreme challenges to economic activity and public finances will remain for years to come. The white-tailed eagle reintroduction programme in Scotland reminds us how investing in wildlife conservation brings more nature into our lives and helps local communities develop new income earning opportunities. This report outlines the impacts of white-tailed eagles on employment and income on the Isle of Mull.

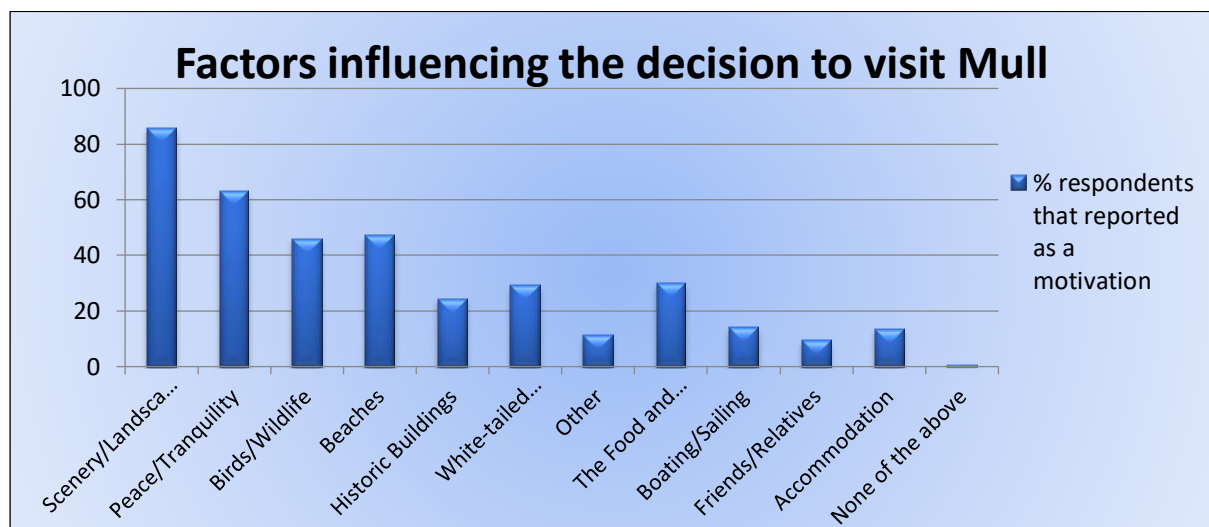
It contributes to the growing body of evidence illustrating that nature conservation and local economic growth can and do go hand in hand.

The surveys

Over several weeks in the summer of 2019, a total of 398 face to face interviews were conducted with parties visiting Mull, amounting to 1,248 people at five different sites on the island. The survey recorded information on the type of visitor being interviewed (holiday maker or day-tripper). The numbers of people reporting themselves as locals were recorded (12.4%) but they were not asked further questions. For holidaymakers and day trippers, information was obtained on the number of people in the group, the amount 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 of how important the eagles were as an attraction to Mull. The surveys were organised, performed, and analysed by the Progressive Partnership from Glasgow. This survey substantially replicated studies done in 2005 and 2010 allowing us to compare the extent to which the importance of the eagles as an attraction has changed over the intervening years.

Initial results

- White-tailed eagles were an important factor in influencing the decision to come to Mull for 29% of all parties interviewed. This is an increase from 23% reported in 2010.
- As in 2010, other aspects of the natural environment featured prominently in the most popular reasons given for visiting in 2019; in particular, scenery/landscape (86%), peace and tranquillity (63%) and birds and wildlife in general (46%).



Graph 1: Factors influencing the decision to visit Mull

The Economic Impact of White-tailed eagles on the Isle of 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 collected 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 the spending up for all annual visitors. The assumptions made to scale up are based on Calmac ferry statistics and are described in the section on assumptions.

| Visitor Type | % visitors | Number of visitors | Number of parties | Daily party expenditure (£) | Length of stay (days) | Total Expenditure (£) |
|----------------|------------|--------------------|-------------------|-----------------------------|-----------------------|-----------------------|
| Holiday makers | 76 | 252,216 | 76,429 | 179.80 | 4.8 | 65,959,547 |
| Day-trippers | 24 | 77,737 | 28,791 | 104.31 | 1 | 3,003,237 |
| Total | 100 | 329,953 | 105,221 | | | 68,962,784 |

On the basis of the surveys and assumptions on total visitors, total annual spending by visitors to Mull is therefore estimated at £69 million in 2019. As indicated in the table, holiday makers contribute significantly more than day-trippers to local spending due to higher visitor numbers, higher daily spend and a longer average period of stay.

Spending attributable to white-tailed eagles

To estimate how much of this £69 million figure we can fairly attribute directly to the white-tailed eagles, visitors were asked about their motivations for visiting Mull. White-tailed eagles were listed as one of 12 possible options. The responses to this question are shown in Graph 1 on page 4. Those who stated that white-tailed eagles were amongst 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 then possible to assign a proportion of each visiting party's spend directly to the presence of white-tailed eagles. We used two different attribution rates (high and low) for each type of motivation response, giving us a range of estimates for total attributable spend.



VisitScotland poster, Craignure Visitor Information Centre. Image: RSPB

| How important were white-tailed eagles in visitors' decision to visit Mull | % of visitor responses | % of spending attributed to white-tailed eagles from these responses | | Total expenditure attributed to white-tailed eagles (£) | |
|--|------------------------|--|------|---|------------------|
| | | Low | High | Low | High |
| One of the reasons | 25.4 | 20 | 35 | 3,503,309 | 6,130,792 |
| Main reason | 3.5 | 60 | 80 | 1,448,218 | 1,930,958 |
| Total | 28.9 | | | 4,951,527 | 8,061,750 |

Based on the foregoing assumptions and calculations, white-tailed eagles were found to support a minimum of £4.9 million and a maximum of £8 million of tourist spend per year on Mull. It must be noted that the attribution rates used here are conservative compared to a similar study on wildlife tourism in Scotland undertaken by the Scottish Government in 2010¹.

Full-Time Equivalent (FTE) Jobs supported

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

| Range | Spending attributable to White-tailed eagles (£) | Jobs supported | Income supported ⁱ |
|---------------|--|----------------|-------------------------------|
| Low estimate | 4,951,527 | 98.57 | £2,178,672 |
| High estimate | 8,061,750 | 160.49 | £3,547,170 |

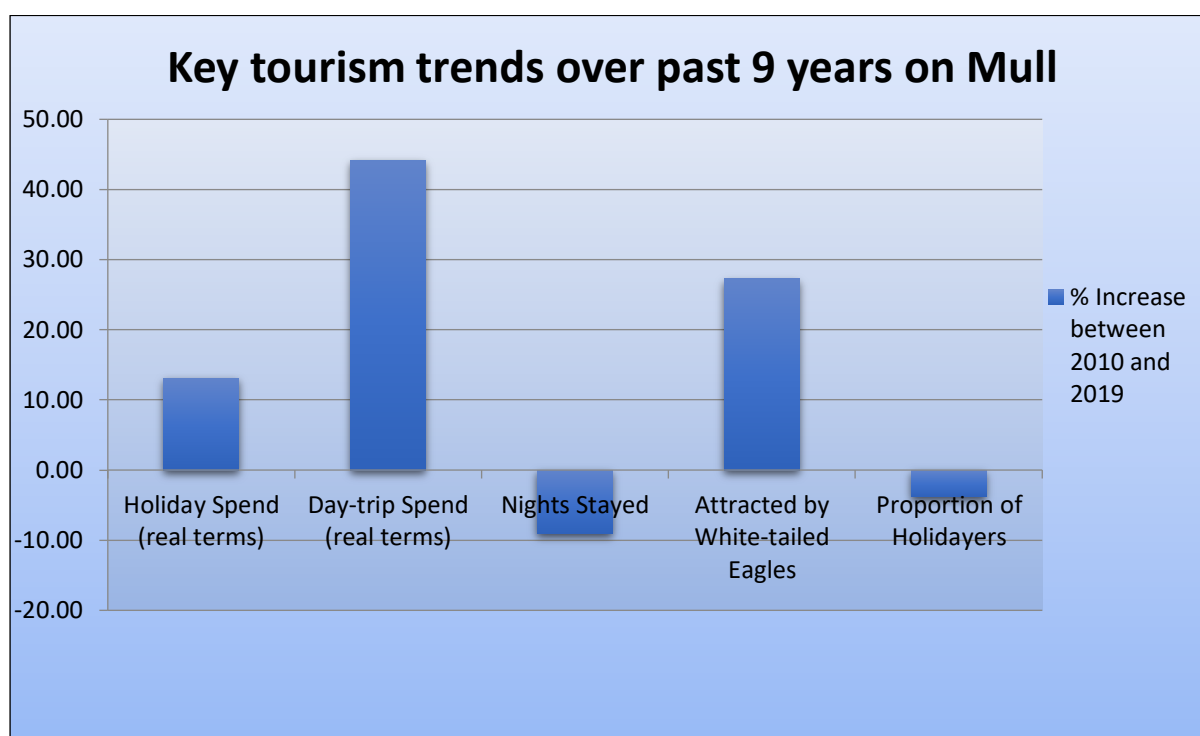
The employment effect multipliers used are from the 2017 Scottish economy [input output tables](#). To be conservative, we have used Type 1 multipliers which only account for the direct impacts and not the further indirect spend and induced economic uplift that arise on the island which are included in Type 2 multipliers. It should also be emphasised that this is not a complete, Gross value-added estimate of the total economic value that white-tailed eagles generate as it excludes contributions to business profits and to public sector finance (taxes). The multipliers used suggest that approximately £50,233 of tourist spend on Mull would be required to support 1 FTE job in the local economy, and that around 44 pence of every £1 spent contributes to income in the local economy.

¹ The Economic Impact of Wildlife Tourism in Scotland (Curtin, Blake 2010) see: https://www.researchgate.net/publication/268630104_The_Economic_Impact_of_Wildlife_Tourism_in_Scotland

Based on these multipliers, the assessment found that white-tailed eagles on Mull support between 98 and 160 FTE jobs and from £2.1 million to £3.5 million of local income each year.

Trends since 2010

A similar study was performed in 2005 and again in 2010. The 2005 results are included in “Watched Like Never Before”, an RSPB report on the economic impacts of this and other charismatic species. This section compares trends between 2010 and 2019. Substantially, the same 2010 questionnaires, sampling methods and analyses were used again in 2019 in order to make comparisons as robust as possible. Unlike in 2010, we did not include the BBC children’s television programme “Balamory” as a motivation for visiting in 2019 as it is no longer regularly aired in the UK. We also asked slightly more refined questions about spend, to get more accurate daily estimates for ‘lumpy’ expenditure like fuel or entry fees. Between 2010 and 2019, there was a rise of 6% in the number of visitors who stated that white-tailed eagles were an important factor in influencing their decision to visit Mull.



Conclusion

White-tailed eagles continue to deliver large and growing economic benefits to the local community on the Isle of Mull. They provide a spectacular wildlife experience for people from across the UK and internationally. The eagles are responsible for up to £8 million worth of spending in the local area, supporting 98 to 160 jobs and £2.1- £3.5 million local income. They are a major contributor to an ever growing base of tourism and economic activity on the island.

The results of this study support similar reports that document the local economic benefits of charismatic species, such as work also from the RSPB on the impacts of the Galloway Kite Trail in Dumfries and Galloway. In an era of increasing power and responsibility being handed to local authorities, this is a valuable message to bear in mind for councils wishing to tackle both unemployment, recovery from Covid and declining trends in biodiversity. In this context, local decision makers should acknowledge the ways in which conservation of the natural environment can complement, rather than hinder, 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 far more 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 can contribute to our 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.

Assumptions

On survey data

a) excluding accommodation spend reported by day trippers. A substantial number of daytrippers reported spending on accommodation. This could either be misreporting or it could be accurate reporting where visitors mainly holidaying elsewhere stayed overnight on Mull. To be conservative in our estimates, we assume these reports to be misreporting and have excluded this spend from our calculations.

b) 6% of holidaymakers reported not knowing expenditure levels. To ensure estimates were conservative, these parties were recorded as having zero expenditure rather than being excluded from estimates of average spend.

c) Surveys were conducted at five different locations across Mull including both general tourist and wildlife/eagle hotspots to ensure a balanced selection of visitors. These locations were: the VisitScotland Visitor Information Centre (VIC) and Calmac booking office in Craignure, the Spar shop and fuel garage in Salen, the Mull Eagle Watch location at Craignure Golf course, Tobermory Main Street and the Tearoom and beach at Calgarry.

Scaling up from survey to total visitor estimates.

We used Calmac ferry visitor data. We took total passenger numbers for the three Mull routes for 2019: Oban-Craignure (652,345), Tobermory-Kilchoan (55,649) and Fishnish-Lochaline (116,889). We divided the total by two to get an estimate of return trips. 12.4% of survey respondents identified themselves as locals. To be ultra conservative, we increased this proportion to 20% of trips. This implies that a total of 82,488 return trips made by all Mull residents. Assuming a Mull population of 2,667, this implies every Mull resident makes 31 return trips per year to the mainland.

We recognise visitor patterns can be influenced by some specific seasonal attractions on Mull. One of our survey periods, for example, coincided with the Mull Half Marathon. We believe, however, that those interviewed for the surveys remain representative of general visitors to Mull.



Signage to 'the Eagle Hide' with views to a white-tailed eagle nest. Image: RSPB

Acknowledgements

The RSPB would especially like to thank Dr Adam Blake, Professor of Economics at Bournemouth University for peer reviewing the analysis and making some important additions.

The RSPB would also like to thank economist Matt Rayment for comments on an earlier draft. Any remaining errors remain the responsibility of the RSPB.

The RSPB would like to thank the Progressive Partnership for their role in performing the surveys and gathering and analysing the data used in this study.

The white-tailed eagle reintroduction project starting in 1975 has been successful thanks to the efforts of many local communities and in particular the land managers who live and work with white-tailed eagles and the challenges they can sometimes pose.

The white-tailed eagle viewing and protection project known as 'Mull Eagle Watch' is a successful award winning partnership between the Mull & Iona Community Trust, RSPB Scotland, Forestry and Land Scotland, NatureScot and Police Scotland.

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Published: March 28, 2022



A group of visitors watching a white-tailed eagle nest at Mull Eagle Watch. Image: RSPB